ARCHIVES OF SURGERY.

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ON INTESTINAL OBSTRUCTION.

(*Continued from Vol. III. page* 11.)

A REVIEWER of my ARCHIVES has called my attention to the circumstance that some of the papers which I have commenced on special subjects have apparently not been concluded. My reply to this criticism is that it has been in most instances quite intentional. One of the advantages which I proposed to myself in periodical publication, as distinct from that of a book, was that it would afford opportunities for returning again and again, if need were, to the same topic, and that there would be no necessity to record conclusions. I have desired to accumulate facts and to suggest opinions, and, leaving both to the judgment of the profession, to await the result of further thought. There is no department of surgical knowledge in which we can venture to stereotype our creed.

The first article in my first number (now nearly three years ago) was on the treatment of intestinal obstructions, and although I have reverted to the subject on many occasions since, it is yet far from being brought to an end. I am sanguine, however, that my papers on this topic have served a useful purpose. At the time that I commenced them there was much enthusiasm for the performance of

laparotomy in these cases, and, above all, it was laid down authoritatively that this measure was the only sound surgery in what was called "acute obstruction." One of my main endeavours has been to show that this latter term was a very misleading one, and that the symptoms which were supposed to denote it might occur in connection with a great variety of causes. My argument has been that the diagnosis of the cause of obstruction in cases in which the symptoms set in suddenly and with severity is not only difficult, but quite impossible. Thus cases of strangulation by bands or twist are not to be distinguished in early stages from those due to other causes. I have urged further that cases of strangulation by bands are often not acute in the early stages, whilst those caused by gall-stones, and other conditions not requiring operation, often appear to be so. Whilst insisting that strangulations by bands, &c., are often in the first instance not in the least tight, I have also expressed my belief that many of them may be released by external manipulations if promptly and properly performed. The rule of practice which I have endeavoured to enforce has been this: that in all cases of abdominal obstruction from unknown causes the first measure should be the use of an anæsthetic and the practice of abdominal taxis. I have insisted that if this were done in the earliest periods of all cases, in many an immediate cure would result, whilst in those in which that was not the case, the diagnosis would be materially assisted. Amongst the items which make up abdominal taxis are very forcible manipulations, inversion of the body, and the use under an anæsthetic of most copious enemata.* I have produced case after case in which, after such measures, recovery has taken place, although at the time all the symptoms deemed to justify and demand an operation had been present. At the same time I have felt bound to undertake the ungracious task of showing that the successes of laparotomy under such

* A systematic writer, who ought to know better, speaks, I observe, of abdominal taxis as "massage." Nothing could be more absurd than to confuse the two things. In attempts at taxis I push the intestines, by the deepest and most forcible pressure that I can use, from one side of the abdomen to the other, and subsequently with the trunk inverted shake them up and down vigorously.

conditions have been very few indeed. I have by no means dissuaded from operative interference * in proper cases, but have only borne my protest against its premature adoption.

Nothing has come to my knowledge during the last two years which has tended to alter the opinions which I formerly expressed, but, on the other hand, much to confirm them. I now proceed to record a few additional items of evidence.

Acute symptoms of Intestinal Strangulation in connection with a reduced Hernia—Abdominal Taxis—Recovery.

In the case of Mr. T——, I was called in haste (Oct., 1891) to an urgent case of abdominal obstruction in a gentleman of 70. He had been in splendid health, and up to the time of his present illness, of active habits. He had long worn a truss for inguinal hernia on the right side, and it was suspected, both by himself and his surgeon, that the present attack was in connection with his rupture. The latter had usually come down easily, and had required replacement every morning. It now remained in place, and there was pain just above the inguinal canal. I saw Mr. T—— about forty-eight hours after the commencement of his symptoms, and was told that they had set in quite suddenly as he was sitting in his chair. Pain began in the groin, and then there was desire to defecate. In the water-closet the bowels acted slightly, and there was vomiting. From that time to the date of the consultation vomiting had continued, and there had been no action of the bowels. I found the hernial sac quite empty, and could easily pass my finger up the canal. There was a sense of fulness and some tenderness in the iliac fossa. I made Mr. T—— stand up and cough, and could not by that measure produce the slightest protrusion of the hernia. The diagnosis seemed tolerably clear that, in some way, strangulation had occurred just within the abdomen, and probably by a band or a twist. It was obviously not a case for delay, and I determined to operate at once should abdominal taxis fail.

* In reference to this point I find that I have been criticised by an American surgeon for not operating in a case which seemed to require it. Had my critic taken time to read the narrative, he would have seen that the patient referred to was not under my care at all, and that the narrative given was a quotation.

We immediately put Mr. T—— under the full influence of chloroform, which he bore well. I then explored the inguinal canal very freely, pushing my finger as far into the abdomen as I possibly could. Next, by deep pressure with the fingers, through the abdominal wall, I pushed everything out of the iliac fossa, and away from the internal ring. In doing this, gurgling was produced. After repeating this several times, and pushing the abdominal contents forcibly from side to side, we then inverted the trunk, and holding Mr. T—— up by the thighs, shook him violently up and down. Finally, we pumped many pints of warm water into the bowel, distending the colon in its whole length. It ought to have been stated that before these manœuvres the rectum had been ascertained to be quite empty. The water which we had injected returned quite clear and without any trace of feces. It was in the evening when what I have described was done, and we decided to wait till the next day to know the result, with the intention of opening the abdomen should the symptoms persist. No food was to be allowed by the mouth. A surgical nurse was to be obtained, and all preparations made for the operation.

On the day following my eldest son went with me to assist at the operation, should it be necessary. We found, however, that the patient had, on awakening from the chloroform, expressed himself as much relieved as regards the pain, and that he had passed a fair night. He had been sick only once. Although the bowels had not acted he had passed flatus. I did not still feel quite satisfied as to his condition, and should have proceeded to an operation had I not found, on introducing the finger, that a considerable quantity of feces had come down into the rectum. This decided me, for it seemed to prove that the cause of obstruction was removed. Another enema was given, and a hopeful prognosis expressed. On the following day all symptoms were absent, and the patient wished for food. His recovery was afterwards uninterrupted. I do not think that there can be much hesitation in believing that in this case something had gone wrong in connection with the hernia, and that we had to deal with mechanical obstruction. All of those concerned felt it to be a most responsible question as to whether the hernial region ought

or ought not to be explored. It was my intention, had I found it needful to operate, to open the abdomen in the middle line, and not to proceed from the inguinal canal. The latter was quite free, and there was no suspicion of a reduction *en masse*. Probably a knuckle of gut had slipped under adherent omentum, or behind a band, or in some way got twisted. Whilst I cannot doubt that mechanical obstruction existed, I have equally little doubt that the manipulative proceedings relieved it. It was one of the nearest escapes from a dangerous operation which I have ever had (and I have had many), for the table and the instruments were all prepared, and, had I not discovered feces in the lower bowel, I should certainly have proceeded.

On the symptoms which attend Strangulation of the Intestine by bands in Cattle, and on the operative treatment of the lesion.

I have found in an old number of the *Veterinary Record* (1847) the following account of cases of internal strangulation of intestine by band in cattle. It is of interest both on account of the successful treatment by laparotomy, and as illustrating the symptoms which attend the lesion. These are just the cases in which it is usually supposed that the symptoms are very acute from the first. We note, however, in accordance with what I have suggested to be the fact in the human subject, that in its onset such strangulation is not attended by any urgent signs of distress. The bowel is not in the first instance tightly gripped, and it is only as the case advances that the symptoms become severe.

I give the quotation almost entire. I feel sure that it will interest my readers.

"On Strangulation of the Intestines in Cattle, commonly called 'Gut-tie.'

"By Mr. E. T. Bass, M.R.C.V.S.

"As the malady thus designated is of somewhat rare occurrence, it is necessary for me, in order to make myself understood, to briefly state what I conceive to be its nature; premising that the subject is still involved in much obscurity, and requires many well-conducted post-mortem examinations in order that its pathology may be satisfactorily and correctly made out.

"'Gut-tie' most frequently attacks working cattle, although at times others may be affected by it. It never attacks the female nor the uncastrated male.

These facts have led practitioners to the inference that castration is the indirect cause of the affection, and I think correctly so.

"Castration in calves is generally performed by first letting out the testicle from the scrotum, then dividing the vas deferens and the reflexion of the peritoneum which connect it with the vascular portion of the cord, thus isolating the vessels; these are then torn asunder, and by their contraction hemorrhage is prevented. But in other cases the vas deferens is also ruptured with the vessels, and thus, in my opinion, the foundation of this disease is laid. The vas deferens, in its course from the internal ring to the part where it crosses to the inside of the round ligaments of the bladder, forms an arch, the concave portion of which is situated inferiorly, or towards the abdomen. This portion of it is closely bound down by peritoneum to the abdominal walls, and also to the brim of the pelvis. On the application of traction to the inferior extremity of the vas deferens, it is evident that the peritoneum which binds down this part of it will be put on the stretch, by reason of the tendency of the tube under these circumstances to assume a straight line; and, if the force be sufficiently great, rupture of the peritoneum will ensue: this may be proved by experiment on the dead animal. The rupture of the peritoneum leaves a loop existing in the abdominal cavity: this loop, as I have said, being formed by the detachment of the vas deferens from the pelvis—and into which a portion of the intestine insinuates itself, constituting hernia. This hernia generally follows some violent exertion of the animal, at a period more or less remote from the time of castration.

"*Symptoms.*—In the first stage dulness of the animal is all that is observed; then follow slight febrile symptoms, accompanied by abdominal pains, though not severe, shown by the animal shifting his position, kicking at the abdomen, switching the tail, and all this time small portions of fæces are being constantly passed. After from twelve to twenty-four hours the symptoms become more aggravated, but not so much as to give any uneasiness to the owner of the animal. The pain is rather more severe, the animal has a peculiar expression of countenance, the fæcal discharge becomes arrested, notwithstanding aperients have been administered; there is a bowing of the back, more especially in the lumbar region, a voiding of masses of clear mucus per rectum, and a straddling, unsteady gait, with constant endeavours to evacuate fæces.

"*Operation.*—This is imperatively necessary; for if not thus relieved, symptoms of strangulation, attended with violent abdominal pain, and hard and quickened pulse, would ensue, which would be speedily followed by death, resulting from gangrene. It is very easily performed, and the following is the method adopted by Mr. Lepper of Aylesbury, with almost uniform success. It essentially consists in dividing that portion of the vas deferens which holds the knuckle of intestine; for this purpose the animal is thrown on the left side, an incision is made in the right flank, in the direction of the fibres of the internal oblique muscle; the peritoneum being thus laid bare, it is cautiously opened; the opening is then dilated, care being taken to avoid wounding the intestines. The omentum is to be then pushed on one side, or, if it protrude, it may be divided without fear, as no evil consequences will result from this division. The hand of the operator is to be then directed towards the pelvic region of the abdomen, and the mass of fæcal matter contained within that portion of intestine anterior to the stricture is to be felt for: by this means the cord which

produces it will be readily detected, and is then to be brought as nearly as possible to the external opening and divided, and if any slight adhesions should have taken place between it and the intestine, these must be broken down. The peritoneum, muscles, and skin are now to be brought together, and the animal allowed to rise. In the course of an hour or two copious evacuations generally take place, and the beast may be considered convalescent. Of course, the animal should for a little time be kept short of food, and that which is given should be of a soft nature."

Some Cases of Recovery from Urgent Obstruction.

I was consulted four years ago in the case of an elderly surgeon, living in the country, who passed through a fortnight's illness with most severe symptoms of abdominal obstruction. The consultations were by correspondence with his medical attendant, for I never saw him. His age and symptoms pointed to malignant stricture, and I advised colotomy. To this, however, he was very averse, and short of it I urged perseverance with large enemata, &c. After he had been, as was described, several days at death's door, his bowels acted, and he recovered. I have seen him recently, and as he has remained four years without relapse, and in good health, it is not likely that he has any stricture. The case was one, no doubt, of block, and I think it very probable that it was one of impacted gall-stone.

I have recently seen my friend Dr. W——, whose case is recorded at page 6, ARCHIVES Vol. II. He remains quite well, and it is now more than two years since his attack. In his case the symptoms were acute, and I was consulted with a view to operation. The bowels acted after a vigorous attempt at abdominal taxis.

Recovery after an attack of Intestinal Obstruction which had lasted twenty-two days—Symptoms never urgent—The excessive use of charcoal suspected as a cause.

A case which deceptively presented a typical example of the course of events which we should expect during the passage of a gall-stone of size sufficient to obstruct the intestine, was narrated to me by the patient himself. I subsequently obtained a confirmation of the facts from the surgeon who had attended him, Dr. Palmer, of East Sheen. The patient in question, a gentleman of 40, who had previously suffered

from dyspepsia, but otherwise in good health, was attacked by pain at the epigastrium which, not very severe at first, became after a while very distressing, and was attended by severe sickness. After two or three days all urgent symptoms ceased, but the obstruction of the bowels, which had been present from the first, persisted, in spite of all treatment, for twenty-two days. Dr. Palmer employed enemata and other measures during the whole of this long period. Consultations were held repeatedly, and finally, at the request of a physician who had been consulted, a surgeon, Mr. Heath, was called in, with a view to an exploration by laparotomy. It was, however, decided not to operate, as the symptoms were no-wise urgent. The enema-treatment was continued. The feature which led to the decision to avoid an operation was the almost total absence of pain and distress. The case was one of insuperable obstipation only, there being no urgent symptoms. At length, masses of impacted feces black with charcoal came away, the bowels acted, and recovery was afterwards rapid. There was never any tendency to relapse, and the patient has ever since had good health. The stools were carefully examined, and no gall-stone was ever found.

It will be seen that in the above narrative we have a short period of pain and sickness followed by a more prolonged one of obstipation without pain. The first might be supposed to be that of the passage of a gall-stone through the common duct, and the latter that of its transit through the intestine. The only features absent are the occurrence of jaundice during the first stage, and the discovery of a calculus in the stools passed at the conclusion. The case had been conjectured to be one of gall-stone plugging. Dr. Palmer informs me that his own opinion is that the obstruction was due to charcoal, which the patient had for some time taken in excess (Bragg's Charcoal, suspended in water). The lesson of the case, as regards the prudence of cunctative measures even in very protracted obstruction of the bowels, is obvious.

On the supposition, probably correct, that this case was really, from the first, one of obstruction by a hardened mass of feces mixed with charcoal, I must again ask attention to the deceptive character of the early symptoms. Through the

greater part of the obstruction urgent symptoms were conspicuously absent, and the case was in all respects exactly like one of blocking. In the beginning, however, there had been two or three days of great pain with sickness. These symptoms subsided just as they might have been expected to do if caused by a gall-stone passing the common duct. Then followed those of quiet obstruction, just such as might have been expected if the stone had got through into the bowel and was plugging it. I insist on these points because they illustrate what has been my contention all along, that the symptoms are in many cases very deceptive, and that but little reliance ought to be placed upon some which writers have held to be important.

The duration of complete obstipation in this case (twenty-two days), is probably one of the most prolonged on record.

PERFORATING ULCERS OF THE SEPTUM.

Most will remember the time when perforations of the septum of the nose were, like psoriasis of the palms, regarded as being infallible indications of a syphilitic taint. By not a few I fear that they are still allowed to rank as such. In 1884 I published * a collection of clinical evidence respecting the perforating ulcer, in proof that not unfrequently it is due to other causes, and that there are forms of it which ought to be carefully distinguished, being connected, not with syphilis, but rather with struma and the tendency to common lupus. Amongst the interesting Essays † which Sir James Paget has just published there is one devoted to this subject which recalls my attention to it. It is right that I should say that, prior to my lecture, Sir James had, in his "Lectures on Pathology," expressed briefly the same opinion.

As the question is one of much clinical importance, and professional opinion is as yet far from being settled in regard to it, it seems worth while to record a few additional items of evidence. I shall at the same time discuss some exceptional cases.

Perforating Ulcer of Septum soundly healed — Subsequent development of Enlarged Glands in the Neck and Ulcerated Chilblains.

The case of Mr. B—— was of considerable interest as an example of perforating ulcer of the septum in connection probably with struma. There was an obscure history of syphilis in early life, but there was no reason to think that he still suffered from it. He was married, and had healthy

* *The Medical Times and Gazette*, 1884, vol. ii. p. 6.

† "Studies of Old Note-Books."

children. The perforation in his septum was a large oval hole which would admit a finger. It was wholly in the cartilaginous portion, and its edges were perfectly sound. I saw Mr. B—— first about a year ago. He came to me a second time on account of enlargement of his lymphatic glands in the root of the neck. In the posterior triangle on both sides there were a number of glands as big as small grapes, very firm and quite movable. They were largest on the right side; they appeared to be secondary to chronic chilblains on his ears. He had suffered much from these chilblains, both on his hands and feet, during the long winter which had just ceased. They were still present as dusky swellings on most of his fingers and his ears. On the latter parts some had been ulcerated. He told me that he had not had chilblains since he was a boy until this winter. He was a man of very active habits, and with the aspect of good health, but it is quite possible that he may have enfeebled his peripheral circulation by a too free use of spirits. In suggesting that the enlarged glands in the neck may have been secondary to chilblains on the ears, it is only fair to add that those on the hands had not produced any in the armpits, and, further, that the enlarged glands were not adherent to each other and that they were very hard, exactly as if affected with tubercle.

Mr. B—— was 44 years of age. His supposed syphilis had occurred in 1885, when he had a bubo in the left groin which was open for many months, and from which had resulted a scar, which involved the groin and adjacent parts of abdomen and thigh. He was salivated for its cure, and thought he had been better ever since. He had never had any secondary symptoms.

We have in this case an example of a perforating ulcer of the septum which had formed insidiously, and the edges of which had firmly healed. There is proof that the subject of it has a feeble circulation, and, subsequent to the ulcer, conditions have developed in the lymphatic glands which are probably tubercular. Inasmuch as no secondary symptoms followed the chancre and suppurated bubo, it may be reasonably doubted whether Mr. B—— has ever had syphilis. The destruction of the septum of the nose which occurs in the

tertiary stage of syphilis is usually rapid and extensive, and demands for its arrest very definite and decided measures. Taking, then, all these various facts into consideration, I incline to think it far more probable that the ulcer in this instance was of strumous nature than that it was syphilitic.

Three Instances of Perforating Ulcer of the Septum in association with Lupus.

I have just seen on the same day three examples of perforating ulcer of the septum, in all of which the history of syphilis is entirely absent. In Mrs. —— (Miss M—— formerly) I treated the ulcer three or four years ago with caustics, and it has remained healed, with, however, recently, a slight tendency to relapse. Her family is phthisical, and one of her sisters suffered from lupus vulgaris in a most severe form, and ultimately died of phthisis.

Mrs. C——, my second case, has a perforation through which the thumb might easily be passed, but it has not produced any falling-in of the nose. The tip of the nose has, however, been destroyed by lupus vulgaris, which has extended somewhat on its sides. Mrs. C—— is of phthisical family, but there is not the slightest reason to suspect syphilis. She has recently been through a full course of Koch's treatment for lupus by Dr. Heron, with some temporary advantage, but not a complete cure.

My third case is that of Miss I——, in whom a perforating ulcer of the septum has been followed by lupus vulgaris on the outer part of the nose.

I could record many additional cases similar to these three in which perforation of the septum has been coincident with common lupus of the nose.

Lupus of Septum with large Granulation-growths—Old-standing evidences of Struma.

The peculiarities of this case are that there is a perforation of the septum at the usual place, which instead of being a chronic ulcer with smooth edges, is attended by masses of

firm granulation on both sides, which block the nares. The condition does not appear to extend far backwards in the nose itself, but it reappears above and behind the left tonsil. At this position there is a patch as large as an almond which is ulcerated and presents firm granulation tissue. There is a good deal of discharge, both purulent and mucous, from the patches. The patient is a young woman aged 29, living at Dorchester. Her history is that ten years ago the late Mr. E——, of Dorchester, removed a "polypus" from the nose. There had been symptoms of disease of the nose for some years before Mr. E——'s operation. She does not know of any history of phthisis in the family, but she has herself always been delicate. There is a scar on her right cheek where something was cut out by the late Mr. T——, of Dorchester; and scars over both lachrymal sacs have been left by the opening of abscesses. There were also scars left by gland abscesses under the jaw, and at different places on the neck.

There can be no doubt that the case should be regarded as one of "struma-lupus." Probably what is called a "polypus" was in reality granulation-growth from the septum. There is no proof of the existence of polypus at present. There are no indications of inherited syphilis. It is very possible that the scar in the cheek represents a cured patch of lupus; although it is somewhat remarkable on this hypothesis that all the scars on the face and neck are perfectly sound, and also that there is no trace of lupus on the gums.

The character of the granulation-growths in this instance was very similar to those of Rhinoscleroma, and might even suggest a suspicion of the development of lupus-cancer.

Postscript.

I have written on this subject since my original lecture, already referred to, in the *British Medical Journal* for 1887, p. 1150.

The reader may also find an interesting paper, confirmatory of the same views, by Mr. Jessop, of Leeds, in the *Lancet* for 1888, vol. i. p. 829.

EPIDEMICS OF CONTAGIOUS PORRIGO IN INFANTS.

In May last (1890) I was requested by the St. Pancras Board of Guardians, at the instance of their medical officer, Dr. Dunlop, to investigate the facts as to an epidemic skin disease which had been for some months prevalent in their workhouse. The investigation proved of much interest, and I purpose now to briefly record its results. The epidemic had affected the infants born in the maternity ward, and had been almost restricted to them. It had been called infantile pemphigus, having been attended in all cases by definite bullæ. There had been no mortality, nor, indeed, had any of the infants been seriously ill.

On the occasion of my first visit to the workhouse I was shown nine or ten infants between the ages of a few days and three weeks, all of whom suffered more or less severely from the eruption about to be described. It occurred with very unequal severity in different cases. In one or two of the slightest, in which it was just beginning, only a single vesication with a red areola was present. In one case, at least, this initial lesion was on a finger. In the worse cases vesications, crusts, and small pustules were scattered over the face and trunk. Some of the crusts were heaped up and rather thick, somewhat like those of dried honey, but in others they were thin and like those of eczema. In all cases the skin at the base of the crusts was more or less reddened.

I was told that all the infants born within the last few months had suffered more or less, and that the eruption often began within a day or two of birth. In some instances it had

been delayed as long as the third week. The children never seemed to suffer much, and in no instance had there been increase of temperature. The eruption, after lasting two or three weeks, usually disappeared under simple treatment. So distinctly had the vesicating character of the eruption been marked, that the term "pemphigus" had been used for them all in the house-register. None of the infants shown to me had been vaccinated. In the first instance, however, in the beginning of February, the eruption had appeared to be developed near to vaccination-sores and in connection with vaccination eruptions, and on that account the practice of vaccination had been suspended. Its suspension, however, did not seem to influence the occurrence of the disease, for the eruption had continued to attack almost every infant born in the ward.

The ward affected was that in which the women were placed who had been recently confined, and in which they remained as a rule three weeks. The confinement ward was close adjacent, and in this the first two days were spent. The eruption had not occurred in other parts of the workhouse. No adults had suffered with the exception of some of the mothers. One mother, whose breast had become covered with pustules and sores, I saw.

The following are some detailed particulars of a case which we subsequently selected for a drawing. Dr. Sturrock, the assistant medical officer, wrote out for me some notes of this case, which, together with some remarks upon the epidemic, I reproduce in his own words :—

"An epidemic, the main feature of which was the appearance of distinct bullæ within from four to ten days after birth, and affecting (roughly) nine out of ten children born, occurred in the Lying-in Wards, and lasted during a period of more than three months in spite of all precautions. This infant, however, was unaffected by it in the Lying-in Wards during three weeks, and in the 'Mother's Nursery,' where it was associated with others who were recovering from it, during a further period of seventeen days. During the month it was out of the workhouse (May 12 to June 8) the skin remained perfectly healthy. From three to four days after readmission to a ward, in which there had been no sign of this condition in any child for over fourteen days, it developed a crop of bullæ, and within a week a fresh crop."

Sarah Ann Mather, the infant of whom a portrait was taken to show the general features of the eruption. Notes communicated by Dr. Sturrock, Assistant Medical Officer to the workhouse. The portrait is preserved in the collection of the Royal College of Surgeons.

1891.	
April 1	Born.
April 4	Ophthalmia neonatorum.
Between April 4 and 11	Developed a papular eruption (Strophulus).
On April 18	Both Ophthalmia and Strophulus had disappeared.
April 21	Removed from Lying-in Ward. During twenty-one days in Lying-in Ward there was no sign of bullæ, or anything approaching general characters of the outbreak. Three days before leaving Lying-in Ward the infant was vaccinated, and the vesicles healed satisfactorily, though on the eighth day there was some slight excess of inflammatory areola, and an appearance suggesting that the vesicles had been rubbed or fretted by the clothes.
From April 21 to May 12	Mother and infant in "Mother's Nursery." During this further interval of seventeen days no sign of a bullous eruption appeared on the infant. During this period there would appear to have been a greater liability on the part of the infant to contract contagion, from the fact that in the lying-in wards all bathing and dressing of the infants is performed either by, or under the supervision of, trained nurses, whilst in the "mother's nursery" the same amount of care is impossible, and the washing and dressing of the infants has to be attended to by the mothers themselves. During this period there were in the "Mother's Nursery" infants who, although they were not suffering from the earlier stages of the attack, were still not quite recovered from cutaneous conditions which had originated in a typical way (as regards this outbreak), *i.e.*, by the appearance of bullæ. Of these there were two principal varieties—(*a*) a condition mainly affecting the scalp, which was covered by moderately thin crusts about the size of a threepenny-piece, but more or less square, and of a yellowish colour; and (*b*) a pure and simple desquamation which affected almost the entire surface of the body. At various parts of the body, arms, or legs, the fringe of a desquamating surface might be seen, and by pulling on it a portion of cuticle an inch square, or larger, might be peeled off without attracting the attention of the infant. This infant was more or less exposed to contagion, during this period, from these infants, but contracted nothing.
From May 12 to June 8	Mother and infant out of workhouse.

1891.	
June 8	Mother and infant re-admitted. Sent again to "Mother's Nursery." On admission child healthy, and skin free from blemish. From April 1 to June 8 the infant has not shown any sign of a bulla.
June 11 or 12	Several bullæ appeared in R. axilla and soon ruptured.
June 17 (Period during which coloured sketch was made.)	A fresh crop of bullæ appeared on trunk of infant, becoming ruptured in twenty-four hours. These bullæ averaged the size of a sixpence, and contained a straw-coloured fluid. When seen they were not tense. At this time there was no case in this ward presenting any feature of this outbreak either in its earlier or later manifestations.
June 29	The eruption has so entirely disappeared that no trace remains of the position of the bullæ. The infant is well nourished. There is a little intertrigo in the folds of the neck.

Returning now to the general epidemic, Dr. Dunlop supplied me with the following items of fact. The first case was on January 24th, when an infant vaccinated on the eighth day showed a bulla near to its vesicles. On the fifteenth day there was a general eruption, which was already desquamating. On the twenty-first day the vaccination wounds had healed, but there was an eczematous eruption over the whole body.

The next case recorded was on February 14th, when, soon after vaccination, the whole body of an infant became covered with a pustular eruption. During the next week there were three cases. It was now decided to desist from vaccination, and the last case done was on February 14th. This measure did not prevent the occurrence of the eruption, and during the next month every infant born in the establishment suffered more or less. In some it began as early as the second day after birth, but in most not till the fourth or fifth day. The bullæ soon dried up, and there followed some desquamation around each. The disease was not attended by any mortality, and most of the patients were well in three weeks.

I carefully inquired as to the soap used, and as to the possibility of contagion from bed-linen, towels, or from any nurse the subject of skin disease. I found that already every possible precaution in these directions seemed to have been taken. The only measure which remained for adoption appeared to be

the closing of the wards, and I advised that this should at once be done.

The closing of the wards was immediately carried out. The confinements were arranged for in an adjoining cottage and under different nurses, no vaccination was practised, and for a month or more no fresh cases occurred. Towards the end of August, however, I received the following letter :—

St. Pancras Workhouse, King's Road, N.W.

Dear Sir, *Aug.* 24, 1891.

I am sorry to say the disease has broken out again in these wards. Immediately after your visit the wards were closed, and new temporary lying-in wards were opened with a fresh staff of officers. I am not aware of any case having occurred in the temporary wards. The permanent nurses were sent away for a period varying from four to six weeks in different cases, the wards were fumigated, whitewashed, painted and scrubbed, every article of clothing was fumigated, old diapers replaced with new, flannels and cotton materials boiled and placed in steam apparatus, and the wards were thoroughly ventilated all through the month from June 20th to July 21st. On July 21st the nurses again came on duty—all well. The first confinement took place on July 25th, and several children have gone out without exhibiting any sign of a bulla. We have now, however, three infants suffering from apparently the very same malady as was prevalent before the wards were shut up. The following are the particulars of these cases :—

I. Louie Baker.
Aug. 9. Born.
,, 14. Vaccinated from calf.
,, 19. One bulla on abdomen.
,, 24. Two bullæ in axilla.

II. Henry Bachelor.
Aug. 16. Born.
,, 22. Vaccinated from calf.
,, 23. Three bullæ on neck and one on thigh.
,, 24. One bulla in each groin, and one on front of elbow joint.

III. William Singleton.
Aug. 18. Born.
,, 22. Vaccinated.
,, 23. One bulla on thigh.
,, 24. Three bullæ on neck.

In no case is there any rise of temperature, nor is the general health of the children in any way affected.

I am sending you a small sample of the fluid drawn from these bullæ in case you should care to have it examined microscopically for bacilli, or in case it may in any way throw light on the cause of the condition.

I am, yours truly,

Wm. Sturrock, Asst. Med. Off.

To Jon. Hutchinson, Esq.

On August 26th I went to the infirmary and saw three infants, the three named in Dr. Sturrock's letter. They all appeared to be in good health. The character of the eruption was the same in all. It consisted of well-developed bullæ of great delicacy, which soon broke or dried up. They were not arranged symmetrically, and in no case did they affect the hands or feet. In no instance were they abundant, but occurred usually in groups of two or three together—on the back of the neck, on the upper arms, on the borders of the axillæ, or in the groins—leaving the rest of the infant's skin quite healthy. In only one or two instances was there present any tendency to general congestion around the vesications. The absence of symmetry was so definite as to make it almost certain that the bullæ were not due to the state of the blood, but rather to some local influence.

I wrote the following comments in the evening after the above-mentioned visit:—These cases differ a good deal from that type of contagious porrigo of which the New Sydenham Society's plates No. XXVIII. and No. XX. are examples. There is none of the heaping up of sticky crusts which characterized those cases. This difference, however, may very probably be explained by the difference in the age of the patients. Thus on the delicate skin of these new-born children all that occurs is the formation of a bleb, which soon either dries up or breaks and leaves an excoriation which is quite superficial, and soon heals under treatment. On the breasts of some of the mothers who have contracted the disease from their infants, the eruption has assumed much more the features of a common porrigo. In saying this, I mean that there is much more formation of crust. It will be seen that all the three patients who have as yet suffered in this second outbreak have been vaccinated. In two, however, the bullæ began to appear on the day after the vaccination; the shortness of the interval being such that it is almost impossible to believe that the vaccination could have had anything to do with the eruption. When we remember that on the former occasion many suffered who had never been vaccinated at all, it seems probable that these children were on the point of developing the rash when the vaccination was done. There can be no doubt

that the disease in this second outbreak is exactly of the same character as in the first. In fact a very remarkable feature is the sameness of its appearance in different children. The inference, therefore, seems unavoidable, that some contagious material of a specific nature, and capable of producing its like on all skins to which it is applied, is to be held accountable for the results. The cases are certainly not in any way accidental. The explanation of the persistent existence of this contagious materies is, however, very difficult of explanation. The wards have been whitewashed and disused, and the nurses have been scrupulously careful as regards their clothing, cleanliness, &c. It will be observed that in this second outbreak the first case again occurred in apparent connection with vaccination, and that the eruption did not develop until five days after the vaccination. In this instance it is therefore possible, as it was in the first case of the first epidemic, that the means of contagion was generated in some connection with the vaccination. It is, however, an improbable hypothesis that on this second occasion we have the *de novo* reproduction of a malady so exactly like its predecessor. It seems much more probable that the virus of contagion has in some way eluded detection and remained in power.

I visited the workhouse again on September 22nd, and learned that during the last month but few cases had occurred, and that the epidemic appeared to be dying out. The maternity department had not, I was told, been so active as usual. The most careful precautions as regards cleanliness, &c., had been taken, and although vaccination had to some extent been continued, the infants had for the most part escaped any development of the eruption.

Dr. Dunlop told me, on my inquiring as to whether this kind of eruption was really new in his experience, that it most certainly was so. He had been fourteen years resident medical officer to the institution, and had never witnessed any similar outbreak. Thus the conclusion seems to be definitely justified that by some means a very subtle contagium had been developed in connection with this maternity ward. Not improbably it had originated from inflamed vaccination spots. It had been perpetuated, however, and

transmitted from infant to infant, quite independently of vaccination. The problem as to where the contagion had found its lurking place, how it had eluded the scrupulous washings of the nurses, and made its reappearance even after a month's abandonment of the wards, is one which almost baffles ingenuity. That it had something to do with the hands or the dress of some one of the nurses, appears to me to be most probable. No evidence, however, could be obtained which in any way supported this hypothesis, and, as already stated, every possible precaution in the way of washing, use of disinfectants, &c., had been resorted to. I have still, however, little doubt that something had escaped our attention. In connection with the subject, I cannot forget that in a case in which a Jewish circumcisor had through a period of some months been occasionally infecting his patients with syphilis, and in which we for some time were quite baffled in our search for the source of contagion, I was at last successful in discovering it in the dirty lining of the case in which carried his instruments and lint.* In the same connection we may also remember that surgeons who were scrupulously cleanly as regards the washing of hands, &c., have sometimes been the means of conveying the contagion of erysipelas for weeks together to their lying-in patients.

On November 28, Dr. Dunlop wrote to me that there had been no fresh case since Oct. 9th. Thirty children had been born in the wards since that date, and none of them had developed "pemphigus." Vaccination had been resumed.

Dr. Dunlop has been good enough to call my attention to a narrative given by a lady (Miss Twining) in a Nursing Journal, which I might otherwise probably have overlooked. Under the title "Pemphigus Neonatorum," Miss Twining, writing from Plaistow, describes an epidemic of jaundice in young infants, attended by bullous eruptions on the skin. The infants were not born in an establishment, but at their parents' homes, the confinements being attended by a staff of midwives under Miss Twining's control. It is stated that of forty infants born within a certain period, twenty-five suffered. Some had but few bullæ, whilst in

* See my work on Syphilis, page 454.

others the whole body was covered. In some cases the mother developed a few blisters on the breasts and thighs, and in a few families the eruption spread to other children.

The epidemic which began in May, 1890, had ceased, under certain precautions, in August. From August to November no case was seen. During the latter month "a baby was brought to the Day Nursery covered with pemphigus." The mother of this infant had not been attended by one of Miss Twining's nurses, and it is expressly recorded that some cases had occurred in the neighbourhood which had been under the care of other midwives. (This fact is easily understood, since the eruption spread in the families of those affected, and might therefore easily be conveyed from house to house.) Miss Twining gives certain details respecting the infant referred to. Thus "the blisters began on the fifth day, the child being a large one and quite healthy. When brought under observation at the age of two weeks, it was covered with sores and blisters, and the navel was still sore. The blebs were snipped, and the skin dusted with starch and boracic acid. Next day there were but few new blebs, and in two days they ceased to appear. The skin first recovered in the centre, leaving an outside raised circle. Underneath the blebs the skin was red, though not absolutely sore unless chafed."

We have here clearly a description of a precisely similar disease to that which occurred in the St. Pancras Workhouse, and it is of great interest to note that the eruption, which in both was most certainly contagious, occurred in the one instance in an Institution, and in the other at the patients' homes. The conjecture which I have ventured above, that the contagium was carried by the nurses, becomes almost a certainty. Miss Twining suggests that in her cases the locality and the weather were important influences, but this supposition is confuted by the other series.

The probability seems to be great that the disease is due to contagion simply, and that all that is necessary is a susceptible skin. On this hypothesis we may note with instruction the following facts :—

1. The eruption (in both series of cases) kept remarkably well to type, being in all cases distinctly bullous, and for the most part easily curable.

2. It was attended by remarkably little constitutional disturbance.

3. The cases got well very completely, every trace of the disease disappearing.

4. Although in the young infants so definitely bullous as to suggest the use of the term "pemphigus," it was not so when it attacked the mothers. In the latter it assumed rather the features of porrigo or an impetiginoid eczema.

5. The term "pemphigus" is inapplicable, since the eruption was purely local, and had no relationship to true pemphigus.

6. It seems probable that in some way the inflammation caused by vaccination produced the material which proved contagious.

7. This contagium had clearly no essential connection with the vaccine virus, for many infants suffered who had not been vaccinated, and the eruption even spread to mothers and other children.

8. The marked non-symmetry of the eruption proves that it was of local causation. The ease with which it was cured by local measures confirms this.

9. The old term "contagious porrigo" is more suitable than that of "impetigo contagiosa," since the initial lesion is always a delicate vesication, and not a pustule. It has also been longer in use.*

10. The cases described are, however, of the same nature as those to which the name "impetigo contagiosa" has been given, and of which several epidemics are on record in supposed connection with vaccination.

* See description of the plates in the Atlas of the New Sydenham Society.

NOTES ON OPERATIVE SURGERY.

(*Continued from page* 145.)

No. X.—*Operations on the Tongue.*

On the invitation of Dr. Mitchell Banks, the President, I had recently the honour of reading a paper before the Liverpool Medical Institution on "The Surgery of the Tongue." * The discussion which followed the paper was of great interest and value. Amongst those who took part in it were Dr. Rushton Parker, Dr. Crawford, Dr. W. Alexander, Mr. Paul, Mr. Harrison, and Dr. Taylor. The chief points which my paper had endeavoured to prove were—first, that return of cancer in the tongue itself is rare, whilst return in the glands is very common. Second, that partial operations, *i.e.*, not involving removal of the whole tongue, are well justified by results. Third, that gland-infection often occurs very early in the case, in some instances almost preceding the recognition of the ulcer itself as being malignant. Fourth, that the results of operations are very encouraging when done early, and that it is desirable in all practicable cases to perseveringly follow up the disease if it returns in the lymphatic glands. Lastly, I put in a plea for the use of the écraseur in preference to cutting instruments, as involving less loss of blood and obviating all risk of blood finding its way into the trachea.

Those who spoke in the discussion related some very triumphant results from bold surgery in dealing with the lymphatic glands and adjacent soft tissues. Almost all speakers had cases to relate in which, after such operations, periods of

* This paper has been published in full in the *British Medical Journal*, and together with a detailed report of the discussion will, I believe, appear in the *Liverpool Medico-Chirurgical Journal.*

immunity had followed which justified the belief that the disease was eradicated. I was particularly gratified to observe that without, I think, a single dissentient voice, the hypotheses of the local origin of these forms of cancer and of the "pre-cancerous" stage were fully admitted. Upon the full acceptance of these hypotheses, as it appears to me, far more than upon the surgeon's selection of any one particular method of operating, rests the safety of our patients. If we believe in the pre-cancerous stage we shall be eager to remove freely all ulcers which are suspicious, and if we have firm faith in the local character of the malady, even after the glands have become implicated, we shall be zealous to follow up the removal of the initial ulcer by the extirpation, when practicable, of all secondarily infected structures.

It appeared to be a general impression that the cases of cancer of the tongue which were usually presented to Liverpool operators, whether in hospital or private practice, were in a much more advanced stage than the majority of those to which I had referred in my paper. One speaker even seemed to regard implication of the floor of the mouth as the ordinary concomitant, whereas my paper had dealt with the disease as if often restricted to the tongue. My reply to this was that in all probability the suggestion was true, since a great many of my cases had been brought to me in the belief that the disease was a syphilitic ulcer and not with the recognized diagnosis of cancer requiring operation. I felt obliged, however, to urge that in all cases of cancer the patient has usually been under the observation and care of some surgeon for a longer or shorter period before finding his way to the operator. It is here that the precious time is lost. What we want is early diagnosis, or at any rate early suspicion. The promptly efficient measures which such suspicion would suggest would be certain to follow. Hence my zeal for many years past in advocacy of the doctrine of the "pre-cancerous" stage. It is not a mere pathological dogma, but involves a piece of practical knowledge which, if widely received, would save every year hundreds of lives.

No. XI.—*The importance of following up our Cancer Cases.*

Dr. Mitchell Banks, the president, in speaking at the close of the discussion, remarked that it would be of value if some one of experience in reference to operations for cancer of the tongue would place on record the whole of his facts. I had myself produced no statistics, and had alleged as my excuse that I did not possess the necessary data, and that especially I did not know the final result in many of my cases and was quite unable to follow them up. My belief is that the final results are not worse, but probably far better, than most of us believe. Thus, for instance, the publication of my paper has already brought to light the result in one case which I had quite lost sight of. In consequence of having read the paper, Dr. Cathcart, of Tottenham, wrote to inform me that a Mr. W——, on whom I operated for cancer of the tongue in 1880, is still living. There has been no return of the disease either in the tongue or the glands. Mr. W—— was forty-six years old at the time of the operation, and I removed two-thirds of his tongue for undoubted cancer. The disease was of three months' duration in its cancerous state. I add this case to a number of others in which I know the results, and in which there is good reason to regard the cure as permanent.

I have also recently received another very gratifying reminder of a forgotten cancer-case. A second-hand book-seller in a large provincial town sent me, a month ago, a valuable old medical book, with an expression of gratitude that I had, as he said, been the means of saving his wife's life. We all know well how little deserved such expressions often are. On this occasion, however, I found that I could with a free conscience appropriate the praise. On looking up my note-books, it appeared that I had operated at least twice for epithelial cancer in the mouth. On the last and final occasion I had removed a portion of the lower jaw and some lymphatic glands. As this was six years ago, it may be hoped that the cure is permanent. At the time the patient left her London lodgings I had but little hope that she would remain

well, for the recurrence had been rapid, and the last operation was a formidable one.

In connection with this topic I may say that I shall be extremely obliged to any professional friend who may be able to inform me as to the final result of any case of cancer of the tongue upon which I have operated.

No. XII.—*On the Use of the Ecraseur for Tongue Operations.*

In advocating the use of the ecraseur-wire (cold) for removal of the tongue or of parts of it, I am influenced solely by the belief that it is a much safer instrument than knife or scissors. It is quite true that by carefully tying each artery as cut, a dexterous surgeon, with good assistants, may get through an excision of the tongue with but very little loss of blood. Even in the best hands, however, exceptional cases will every now and then occur, and it is these which spoil the statistics. It is not merely the loss of blood which is dangerous, but there is always risk that some of it may find its way into the air passages. The loss of blood is, however, to the old and feeble persons who are often the subjects of these operations, not a matter to be lightly thought of. That ecraseur operations are safe, that no risk whatever attaches to the sloughy surface which the wound is apt to assume a few days afterwards, I can testify from very considerable experience. For many years I have never used any other instrument, and, with the exception of one at the London Hospital, I have never lost a single patient. The division of the tongue is always accomplished without any bleeding, but after it is complete I always seek the lingual arteries and try to provoke them to bleed in order to tie them. This is done by way of precaution, for since I abjured the cautery wire I have had no trouble with secondary hæmorrhage. The bleeding of the linguals referred to is always very feeble, just sufficient to reveal the artery and no more. It never involves any risk of blood passing back into the throat. I now always use a cold iron wire and cut very slowly, taking at least half an hour to the procedure. It is not a showy operation, but I

repeat that I believe it far safer than any other. As regards the place of election, I always now content myself with being well behind the disease, and by no means regard it as essential to take the whole tongue. If the disease is on one side, the line of section crosses the tongue obliquely. There is no inconvenience as regards subsequent speech from these oblique divisions, and I very decidedly prefer the stump left by them to that resulting from the removal of one longitudinal half of the organ. One great advantage which in my opinion attaches to the ecraseur is that operations by its aid require patience only in order to success. They may be performed by any one at any time, and the operator is but little dependent upon his assistants. This is an advantage not to be despised when we remember that the circumstances under which cases of cancer of the tongue first come under surgical observation are often such as do not permit of immediate recourse to a hospital or to a surgeon of special experience in such cases. Were operations of this kind less formidable in the general estimation of the profession, we may feel sure that they would often be performed at much earlier periods; and this, after all, is the grand condition as regards permanent results.

Postscript.

Since the above was written, I have received the ninth volume of the "Transactions of the Royal Academy of Medicine of Ireland," which contains an important paper on Excision of the Tongue for Cancer. The paper is by Mr. Croly, and warmly advocates ligature of the lingual arteries as a preliminary to the operation, thus bearing testimony to the fact that, despite modern methods, the risk of bleeding is, to him, still a matter of considerable anxiety. In the course of the discussion, Mr. Lestaigne stated that "he had seen several cases in the hands of excellent surgeons where very severe hæmorrhage had occurred." These admissions quite accord with facts which come to my own knowledge, for although some of my friends who use scissors speak very lightly of bleeding, I still hear not unfrequently of cases in which it proved severe, and in all probability much prejudiced the patient's prospects.

CONTAGIOUS ECZEMA.

(*Resumed from page* 154.)

The epidemics of contagious eczema in certain London Workhouses which were the subject of a short paper in my last number of Archives, have since been very fully discussed at a meeting of the Medical Society. Dr. Savill then read a detailed paper on the cases which he had observed in the Paddington Infirmary. It will be remembered that it is to Dr. Savill that the credit is due for having drawn professional attention to these remarkable outbreaks. His paper was liberally illustrated by photographs, coloured drawings, and temperature charts. In the discussion, Mr. Lunn, of the Marylebone Infirmary, detailed his experience, and Dr. Richards, of Hanwell, stated that in the asylum under his care (the female department) there had also occurred a similar epidemic. I have little or nothing to add to the facts which I have already given as regards the cases at Paddington and Marylebone, but as Dr. Richards' facts are new it will be well briefly to summarize them. The disease began to prevail at Hanwell in July, and the cases being like those of common eczema, it did not at first attract special attention. In the course of a month, however, the cases became numerous. The epidemic was at its height in September and October, and came to an end in November. There were altogether about 38 cases, or about 3 per cent. of the inmates. Of these, five occurred between 30 and 40, six between 40 and 50, twelve between 50 and 60, eight between 60 and 70, and seven between 70 and 80. There were no deaths, and some of the patients had appeared to get well quite independently of treatment. Dr. Richards described the eruption as having been of the same character as in the cases of Dr. Savill and Mr. Lunn, but on the whole,

perhaps, of a milder type. The eruption had usually commenced on the face, and had spread as a pityriasis, or as eczema with a characteristic thin serous discharge. In some cases the skin had become thickened and swollen, with large cracks and figures. Dr. Richards had inquired carefully into the possible influence of diet, soap, &c., but without eliciting anything.

Amongst others who took part in the debate were Dr. Campbell, Mr. Startin, Dr. Stephen Mackenzie, Dr. Crocker, and Dr. Downs. The last-named gentleman stated that he had inquired at various other institutions of a similar kind, with the result that he had not been able to hear of other epidemics excepting at one. In this instance, "a workhouse in the west," there had been an unusual amount of general eczema and three or four cases of pityriasis rubra.

Dr. Crocker in an able speech took precisely the same view as to the facts which I had expressed in my former article; and Dr. Mackenzie, though with less confidence, gave on the whole support to the same. Mr. Startin made the ingenious suggestion that there were some features in which the malady resembled a superficial form of erysipelas. With this I entirely coincide, for although there are very wide differences between the forms of dermatitis which we recognize under the name of erysipelas and those that we speak of as eczematous, yet it seems highly probable that there are hybrids between the two, and that when eczema becomes contagious, as in the present instance, it does partake in some slight degree of the nature of erysipelas. I have long been in the habit of using the term "eczema-erysipelas" (see ARCHIVES, Vol. I. pp. 199, 204), although not in application to precisely the same class of cases as those now under consideration. I endeavoured to give a clear summary of the facts bearing upon these suggestions in an address delivered at Manchester three months ago.*

In the paper to which I have referred I ventured the remark that if my views as to the nature of workhouse

* Of this address on "Contagion from a Clinical Standpoint" I have by me some copies, and shall be glad to send one to any of my readers who may wish for it.

epidemics of eczema were correct, we should soon hear of others, since the conditions favouring them must have been long in existence. In confirmation of this forecast I have received an interesting letter from Dr. Frank A. Elkins, now assistant physician to the Morningside Asylum, giving the particulars of an epidemic which occurred under his observation in the Greenock Parochial Asylum in 1888. Dr. Elkins writes:—

"In 1888, when I was assistant medical officer at the Greenock Parochial Asylum and Poorhouse, there was an epidemic such as those described as occurring in the London Workhouses. The persons most attacked were the old and feeble. As far as my memory carries me the deaths numbered about twelve, and I should think about fifty had the eruption and other symptoms of the disease. Most of those attacked were residents either in the Infirm Wards, or else in the Infirmary of the poorhouse. The lunatics, with a few exceptions, escaped. Several of the attendants had slight attacks, as did also the matron and myself. One of our most robust male attendants suffered severely. The eruptions were by no means all of the same character, some being eczema and others more like psoriasis. The commonest form was an intense weeping eczema from head to foot. The attendant whom I said had it so severely, had an eruption very much like small-pox, and many other cases had most anomalous skin affections. The weakness, lassitude, and torpidity produced were very marked. In many cases intense diarrhœa, with bloody stools, came on before death."

In a subsequent letter Dr. Elkins told me that Dr. Wallace of Greenock, the visiting medical officer of the Poorhouse, had taken great interest in the subject, and had consulted Dr. McCall Anderson repecting it. A strong suspicion had been entertained that the soap used in washing the clothing might have been the source of irritation.

On this point, however, nothing was proved, and I have already stated my own reasons for believing that the disease is due to a contagious materies generated in connection with the dermatitis, and that it is not in any degree dependent upon mechanical irritants.

DOCTRINAL PATHOLOGY.

(*Continued from page* 176.)

We shall, I think, be quite safe in making certain inferences as to the nature of lupus erythematosus from our methods of cure. It is tolerably certain that if in the same person certain patches of the disease may be completely and permanently cured whilst others persist, that the disease is to some extent local. There may be a constitutional proclivity, but, I repeat, if, by cauterization, a patch may be prevented spreading and made to heal soundly, then it is clear that its spread must have been due to local infection of the tissues. The complete success of local treatment proves that the malady so cured was at any rate to a very considerable extent a local one.

Now the results of local cauterization in the case of lupus erythematosus are in many cases most marked. In the instance of Mrs. K——, who presented a very definite example of it, and had patches on her nose, cheeks and upper part of chest, I applied the acid nitrate of mercury in caustic solution repeatedly. A patch on her chest, two on her left cheek, and one on her right, healed soundly. A thin white scar was in each of these left, around which there was never the slightest tendency to return of erythema. They remained, during the two years that I was still trying to cure the patch on the nose, quite sound and quiet. Exactly similar results are constantly seen in lupus vulgaris. We cure one or more patches completely by local treatment, whilst in others we fail to quite arrest the process. In both the forms of lupus it is common to see in connection with the nearly cured patches

little spots recur at the margins of the scar. These are to be regarded as proof that the cauterization did not succeed in destroying quite all of the infective material. Some little fragments of cell-tissue were left behind, and from these the new growth develops. They prove also that the disease in each instance spreads by local infection.

I have in many other cases besides that of Mrs. K—— succeeded in producing quite healthy scars in some of the patches of lupus erythematosus, whilst the disease still persisted in others.

The kind of connection which exists between acne and the state of the blood and general health was well illustrated in the case of a young married lady named K——. I had treated this lady before her marriage, and also a sister of hers, for acne; I believe a brother also, so that we may assume that there was a strong family tendency to the affection. Mrs. K—— had often been anæmic, and, by different physicians, steel had been prescribed, with, as she assured me, the invariable result of bringing out a crop of acne spots. She married in 1889, and not long afterwards, without obvious cause, became very anæmic, and whilst in that condition quite lost her acne. Steel was again given, and she improved in health, but again had acne. Of the latter, under appropriate treatment, chiefly local, she got quite well. About two years after her marriage she for the first time became pregnant. The apparent result of this was that she acquired better health than she had ever before had, but in the fourth month of her gestation she came to me with her face covered with acutely inflamed acne, and an acne-abscess in the middle of one cheek. It was the pain caused by the latter which chiefly made her seek advice. I punctured it and let out a considerable quantity of pus. Now acne is rare in pregnancy, and acne-abscesses are very rare in women, and even in males they very rarely assume a painful state of inflammation. The only explanation which could be discovered of the occurrence in this instance was that the patient's digestion and appetite, in connection with pregnancy, had raised her state of blood much higher than its wonted standard.

She had passed into the reverse condition of her former almost habitual anæmia, and as the latter had been attended when at its height by disappearance of acne, so the former had produced an acute outbreak. She was in the condition popularly known as "full-blooded," one for which in the olden time she would undoubtedly have been bled. It must be remembered that this full-bloodedness was only relative, and occurred to a person ordinarily feeble and deficient in tone. Real and habitual vigour, however highly developed, is not, I believe, ever productive of pustular or suppurative inflammations. Observation of those who suffer from acne in connection with seminal losses will, I believe, to some extent confirm the lesson which this case seems to teach. We often see those whose tone is reduced, by masturbation and the like, to the lowest point, and who have become exceedingly pale and feeble, but who have no tendency to acne, whilst those who suffer most severely from the latter are often in fairly good health, or even florid. There are, I am aware, many exceptions to almost all statements which can be made on this matter, but of one thing I think we may be tolerably sure, viz., that the condition of extreme anæmia is very unfavourable to the development of inflammations of the pustular, or furunculoid class, if not of all forms.

The term "idiosyncrasy" is apparently understood in very different senses by different writers. At any rate I can find no other way of explaining a statement made, with great emphasis, in a recent review of the literature of Anæsthetics to the effect that no one now thinks of adducing idiosyncrasy as an explanation of fatal cases. I may confess that to my own mind it still looms out as by far the foremost of the agencies at work. No doubt a different degree of risk attaches to the different drugs used; no doubt some appliances for administration have their own special dangers; and lastly there is not the slightest doubt that inattention on the part of the exhibitor is often responsible for an accident. When, however, we have made all allowance for these factors, it remains surely to be stated, in the clearest terms, that no two persons are alike in their degrees of susceptibility, and that there are

those who, quite independently of any obvious derangement of general health, are susceptible in a most peculiar degree. This peculiar liability of individuals to the poisonous influence of special drugs exists in reference not only to those which we use as anæsthetics, but runs through the whole pharmacopœia. By iodide of potassium, by arsenic, by mercury, by belladonna, one here and one there is liable to be poisoned, and no skill can recognize beforehand those who are so. To such liability the term idiosyncrasy is applicable, and it seems strange indeed that it should be necessary at the present time to insist upon its reality in reference to anæsthetics. During my surgeoncy to the Moorfields Ophthalmic Hospital I never had a death from anæsthetics, and very few cases of alarm. In one instance, however, in extracting cataract for a man between fifty and sixty we very nearly had an accident. Artificial respiration was needed, and by it and the nitrite of amyl he was just saved. Years passed on, and so far as anæsthetics were concerned quite smoothly, and then again in another operation for cataract exactly the same alarm occurred, and the same measures were required. The house surgeon told me afterwards that our patient was the same man who had given us trouble before. I had not myself identified him, but on looking up the notes I found that he was correct.*

No one, I suppose, doubts that entire destruction of the new material—the lupus-granulation-tissue—is the essential principle in the treatment of common lupus. We regard that material as the cause of infective spreading, and desire its removal with the same object and like zeal as the farmer seeks to eradicate couch-grass from his field. So long as any remains we know that the malady will be reproduced. I am convinced that the facts are essentially similar in the case of lupus erythematosus. Although the constitutional element may be greater in the latter, yet both alike are locally infective maladies, and both alike spread by virtue of the contagious qualities of their products. Unfortunately, however, this principle is far more difficult to carry out in the case of

* See "The Pedigree of Disease," p. 48.

lupus erythematosus than it is in its congener. The patches of the former are often very large and numerous, so much so that it is quite impossible to make a cauterization which shall be sufficient to destroy all infective material. If the destruction be incomplete we often seem to do more harm than good, for the inflammatory congestion which is produced by the caustic appears to afford a suitable nidus for infection, and the area involved is rapidly extended. Thus, like persecution for the suppression of opinion, unless it is relentless and complete it is worse than useless, and ends in aggravation of the evil. I have seen this in many cases.

There are, moreover, many cases of lupus erythematosus in which, owing to the extent involved, caustics cannot be thought of. Nor does the disease in many instances wear, for the patient, a sufficiently formidable aspect to justify the production of an extensive scar. It may be that the nose, cheeks and forehead are almost wholly covered by red and slightly scaly patches. The crusted ulcers and deformity which go with common lupus are wholly wanting, and any treatment on the part of the surgeon which would involve the production of scars would certainly be regarded unfavourably by the patient.

Every one must have noticed that in the tertiary stages of syphilis the disease often appears to keep almost exclusively to one tissue. It may be the skin or the mucous membranes, or the bone, but it is, I think, exceptional for several different structures to suffer severely at the same time. A patient may have his skin affected over very large areas by a superficial syphilitic lupus (as an example of which see portrait in my Illustrations of Clinical Surgery), but in such cases neither the nervous system nor the bones will suffer. On the other hand, if there be one node it is highly probable that there will be several, and also probable that the skin will escape. Sometimes the same patient may suffer severely in one tissue for a time, and then after an interval of years have another affected. I attended a lady some years ago for a very severe affection of her tongue and mouth. It got quite well under treatment. She came again to me the

other day, apparently in excellent health, but with three nodes, one on her skull, one on the lower jaw, and a third on the sternum. All had formed within the last five months, and they were the first that she had ever had. The suggestion which I have to make as explanatory of such facts is that probably one lesion produces another by infection, and that the infective material selects for its development a tissue of the same nature as that in which it had its birth. Thus one node may cause periostitis of several bones, but is not likely to breed lupus in the skin. All the facts with which I am acquainted in respect to lupus from syphilis are parallel with those of tubercular lupus. Both are unquestionably infective at the borders, both tend to produce satellites, and both may in exceptional cases become generalized. There is no reason to believe that in syphilitic lupus the specific virus of syphilis is present. It is never a source of contagion to others. We must regard it as a local inflammation in a syphilitic subject rather than as a part of the specific fever. So with its contagiousness to the person who is its subject; the phenomena are those of the contagion of inflammation-products only.

I have got another point in reference to the relation between alopecia areata and cryptogamic disease of the skin. I have hitherto held that it is usually either a sequel of ringworm in childhood, or derived by an adult by contagion from a child suffering from ringworm, or, lastly, by direct contagion from itself. A certain number of cases, however, are met with in which none of these modes of origin can be shown to be probable, and several of my friends who have large opportunities of observation have assured me that they have not found a history of previous ringworm nearly so frequently as has been my own experience. My new point is this: that it may possibly be produced by contagion from tinea versicolor, a disease which I have for long held to be a transmuted form of ringworm.

A week ago a very healthy gentleman from the country came to me on account of alopecia areata. It was the ordinary form of large bare patches, so large that he was obliged

to wear a wig. He was thirty-five years of age, and had suffered from his alopecia in spite of much treatment for more than four years. I could elicit no admission that he had ever been in contact with ringworm. He was a farmer, but he was not aware that any of his calves had suffered. He was quite certain that he had never been engaged in treating any. Just at last, when my inquiries were about to end in a negative, he remarked, "I have got some spots on my chest." He showed me a number of versicolor patches which had, he said, been present some years. On microscopic examination I found plenty of fungus.

For the last five and twenty years I have honestly and zealously studied the Leprosy problem. I have availed myself of all opportunities, whether by observation, conversation, or reading, for acquiring facts, and I have used the best judgment that I possess in their interpretation. I now avow my conviction that the doom of leprosy might, at any time, and for the whole world, be pronounced in three words :—COOK YOUR FISH. If the inhabitants of leprosy regions could but be induced to eat nothing taken out of the water (whether cured by salting, or fresh) but what had been thoroughly cooked, I do not believe that in another quarter of a century there would be a leper left.

I have the less hesitation in avowing this belief, because the resulting recommendation is one which could not possibly do any harm. It would not diminish our food supply, nor would it require for its realization any of the cruel proceedings which compulsory isolation involves.

Many years ago I was inclined to place leprosy with gout, as a disease in part the result of improper food and in part of hereditary tendency. I then called it "the gout of fish-eaters." The subject has, however, been much narrowed by the observations of recent years. It is clear that well-cooked fish is quite wholesome and free from danger. The supposed proofs of hereditary transmission have all broken down. We have found that it is easily acquired by those who could not possibly inherit it, if they go to live in a leprosy district and

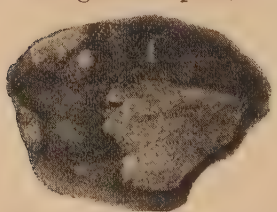
adopt the food-habits of the natives. We have found also that a peculiar bacillus usually attends its development. Thus it passes away from the side of gout and takes its place in that group of parasitic maladies, the germs of which are taken into the stomach with food. Of these, tape-worms, cysticerci and the trichina disease are examples, and perhaps tuberculosis and the psorosperm disease of rabbits. It is obvious that in proportion as the evidence in support of the belief in contagion by the skin and in the influence of hereditary transmission is found to thin away, so does the theory of mouth- or food-contagion gain in force. It is the only explanation left to us. If once we accept the food-theory, then the overwhelming mass of facts which connects leprosy with fish-producing localities, and fish-eating peoples, assumes its proper place. The traditions of all countries and of all ages come also to our aid. The often-quoted "Hill tribes," who although they cannot get fish yet get leprosy, and the high-class Bramins, who become lepers although they would not touch fish under any circumstances, become more and more apocryphal the more they are investigated. The supposition that a small quantity of salted or preserved fish may easily be sufficient to carry the leprosy germs, fully meets any evidence of this kind which can be offered.

If the facts as regards local affections of the arterial system, which I have recently recorded, bear the interpretation which I have put upon them, we shall have to place increased emphasis on the declaration that the pulse, as a symptom, is a *res fallacissima*. It is clearly not safe to take the state of the radial artery at the wrist as a trustworthy indication of the condition of the arteries elsewhere. It appears not improbable that changes inducing enlargement of vessels and increased thickness of the coats may be due to local disease, and may be restricted to certain trunks. One of the cases which I record in this number (see p. 260) shows that the ulnar vessels may enlarge and become tortuous, whilst the radials remain normal. The case also makes it probable that something of the nature of chronic inflammation of the arterial coats may be the cause of dilatation.

The suggestion which I made in my last number that rabbits get rid of their psorosperms *viâ* the gall-bladder and intestines has been confirmed by further researches during the last three months. During the spring and early part of summer every rabbit shot, whether old or young—but the young much more severely than the old—suffered from the disease. At the present time there are, of course, no young rabbits to be found, all being either full-grown or nearly so. Without an exception the rabbits killed within the last few months have been practically, although not absolutely, free from the disease.

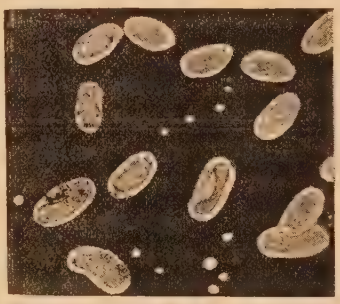
A cursory examination of the liver would leave the impression that it was quite healthy, but on careful search a number of little white specks, not so big as pins' heads, may in almost all instances be discovered. These are clearly the remains of psorosperm nodules which have been removed. They are usually firm and fibrous, and in some a few dead coccidia may be found. There is little or no appearance of cicatrisation in the tissue surrounding them, and the probability seems far greater that the parasites have escaped by onward transit than that anything of the nature of absorption has occurred. In several instances I have found the fluid bile in the gall-bladder full of coccidia. It may be noted that the rabbits, all of which presumably suffered severely in spring from the disease, are now without exception in excellent condition.

All gamekeepers, warreners, &c., are familiar with what is called the "speckled liver," which is caused by the psorosperm nodules. From many sources, since my report on this subject in the last number of ARCHIVES, I have been informed that the disease has been specially common this summer, and almost all agree in saying that it is caused by damp seasons, and that its prevalence this year is to be thus explained. This is, however, clearly a mistake. The spring and early part of summer this year, so far from having been wet were unusually dry, and it was



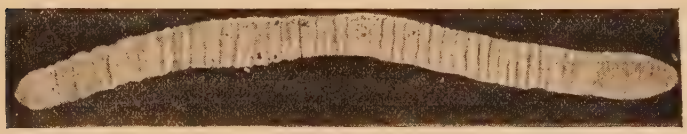
Portion of liver to show the size of the white masses caused by psorosperms (natural size).

during this dry period that the prevalence of this psorosperm disease set in. During the wet of the latter half of the summer and the whole of the autumn it has been steadily disappearing. Most of the animals upon which my own observations were based were shot on dry, sandy hills where, whatever the amount of rainfall, there is never even the most temporary accumulation. It seems highly probable that this malady in the wild rabbit is a seasonal disease, and occurs only in the spring and early summer, and also that it affects with most severity the young animals.



The psorosperms highly magnified.

The prevalence of tape-worm in rabbits appears to have no



Tape-worm of the rabbit (Tenia pectinata). Natural size, but a very short one (young). They are often six or ten times this length.

relation to their health, and the same remark applies to the Cysticercus pisiformis. About one quarter of all that I have examined lately have been affected with these parasites, and all have been in splendid condition. Neither of these are to be found in very young animals, indeed I have seldom seen the cysticerci except in adults.

Dr. Numa Rat, of the Leeward Islands, has just published an excellent Essay on the nature of Yaws. On his suggestion, and at the request of the Colonial Office, I have contributed a Preface. Dr. Rat's hypothesis is that the disease belongs to a family of "Syphiloids," whilst my own suspicion tends rather in the direction of its being merely syphilis modified by race. The Colonial Office has placed at my disposal a few copies of Dr. Rat's Essay for distribution, and I shall be glad to send one to any public library that may desire to possess it.

NOTES ON THERAPEUTICS.

No. XIV.—*On the Local Uses of Mercury.*

Under the name of Unguentum Metallorum there used to be in the Pharmacopœia of, I think, Guy's Hospital, a very popular ointment which contained several metallic salts. The principal ingredients were salts of mercury. I am not careful to reproduce the precise formula, because it was perhaps of but little consequence, the essential point being that some salt of mercury should be well diluted.* My motive for mentioning it is to emphasize the belief that mercurial ointment will, if patiently used, cure almost every form of chronic local inflammation. As already hinted, it does not matter much what the exact formula is: the point being to rub in repeatedly some non-irritating and dilute mercurial preparation.

A formula which I constantly prescribe, though probably no better than many others, is yet exceedingly efficient. It is a scruple of the ammonio-chloride and ten grains of the yellow oxide, to the ounce of lard with a little lanoline. Sometimes a few grains of the nitric-oxide are added, or calomel is substituted for the white precipitate. In obdurate cases, and especially in chronic ulcers of the legs, the bisulphuret in the proportion of two grains to the ounce often greatly increases the efficiency.

* These observations respecting the importance of the dilution of our remedies receive confirmation from bacteriological observations. In an interesting lecture delivered a few weeks ago in the Examination Hall, Dr. Armand Ruffer demonstrated that while strong dilutions of various salts, oils, &c., had the effect of repelling leucocytes, very weak ones, had precisely the contrary influence, and attracted them in large numbers.

For pustular eruptions of all kinds, chronic boils, sycosis, sores in the nostrils, broken chilblains, and the like, such ointments are almost certain cures. I have carefully tried experiments, with others not containing mercury, and feel convinced that, although undoubtedly a hundred kinds of salves, and even simple vaseline alone, are unquestionably most valuable as being protective and healing, yet most undoubtedly a salt of mercury exercises a very definite influence in increasing efficiency. Pustular sycosis is perhaps one of the maladies in which this trial may most easily be made.

We have here, I cannot but think, a most important lesson as to the effect of mercury upon cell growth and development. If the preparation be but weak enough, it favours organization, and represses those tendencies to tumultuous reproduction which make up what we know as inflammation.

No. XV.—*Details as to the Use of Ointments.*

There are perhaps few subjects in respect to which custom hangs on us with a more heavy weight than in the directions which we give to our patients as to the use of ointments. In nineteen cases out of twenty the formula is, "Take the mixture three times a day, and apply the ointment at bedtime." Now in a large number of cases the direction ought to be three times a day, at least, for the ointment also. Further, the application ought to be each time a definite inunction, occupying a few minutes for each spot, and not a mere anointing. It is astonishing what may be done in many skin diseases by appropriate ointments used in this way. To order simply an anointing on going to bed is to do little more than nothing. Nor is it much better to apply the salve on lint; what is needed is patient and repeated inunction. If the patient will take the trouble three times a day to undress before a warm fire and take his time to a patient inunction, he may in many cases dispense with the disagreeable condition of keeping the skin always greasy.

I am in the habit of employing these frequent inunctions not only in cases curable by mercurial ointments, but in those also such as psoriasis, requiring tar or chrysophanic acid. In a little girl now under treatment for psoriasis,

arsenic definitely disagreed, and the spots persisted. I disused the arsenic, made the chrysophanic acid ointment stronger, and insisted upon the nurse using it by inunction three times a day. The result was that the health improved, and the spots rapidly disappeared.

No. XVI.—*Mercurial Lotions sometimes preferable to Ointments.*

A gentleman wrote to me: "You may remember my having called on you two or three months ago on account of eczema. Your first prescription not having eradicated it, the second, bi-chloride of mercury, has settled the matter, for it is gone."

As it is an unusual thing to cure eczema with the bi-chloride, I took the trouble to look up my notes of the case, and found that my patient was an old gentleman of seventy, who had consulted me on Sept. 14th for what I then called "Eczema-porrigo of the chin, with a honeyed crust." He was wearing his beard, and the hairs were matted together. It had been present then two months, and had persisted in spite of treatment. I prescribed for him, in the first instance, an ointment containing tar and the white precipitate. Two months later, on Nov. 10th, I found him but little better, and noted that the eruption was still moist and distinctly pustular. It was then that I prescribed the bi-chloride wash which rapidly effected a cure. The ingredients of the latter were as follows:—Four grains of bi-chloride of mercury, two ounces of spirits of wine, half an ounce of glycerine, and twelve ounces of rose-water. The directions were to bathe the roots of the hair freely night and morning, and, after drying, to apply the ointment. The ointment was the same which had been used before alone, and which did not cure. This case proves that in some instances solutions of mercury are more efficient in stopping the inflammatory process than are ointments.

No. XVII.—*The Treatment of Gonorrhœa.*

My treatment of gonorrhœa in all stages has for long been very monotonous. Almost without regard to stage or degree

of severity, I prescribe the same remedies. I have long ago laid aside the traditions of my student days which taught that salines only should be used in the acute stages, and that abortive plans were dangerous. I always use abortive measures, and mostly, I believe, succeed. At any rate, I never encounter ill consequences, and complications are rare. My prescription is a partnership of three different remedies, and it is, I believe, important that they should all be used. First an injection of solution of chloride of zinc, two grains to the ounce; next sandal-wood oil capsules, and, lastly, a purgative night-dose with bromide of potassium. The injection is used three or four times a day, the capsules (ten or twenty minims) taken three times a day. The ingredients of the night-dose are three drachms of Epsom salts, and half a drachm of bromide of potassium. It is, I believe, the action of the last named in preventing congestion of the parts which makes the abortive measures safe. Moderate purgation and entire abstinence from stimulants are essential. If the case is very acute and attended by swelling of the corpus spongiosum, I sometimes prescribe tartar emetic or tincture of aconite, but it is very seldom indeed that these are necessary. If the patient be well purged there is no risk whatever in an abortive treatment from the day that he comes under treatment. The risk of orchitis, prostatitis, cystitis, &c., comes in cases which have been allowed to develope rather than in those treated abortively. I should as soon think of delaying to use local measures in gonorrhœa as I should in purulent ophthalmia.

DISEASES OF THE NERVOUS SYSTEM.

No. XXXII.—*Long persisting Tonic Spasm of one Sterno-Cleido Mastoid, possibly in association with Morphœa.*

The case of Miss C—— presented an example of a muscular condition with which I am not familiar. Her left sterno-cleido mastoid is constantly rigid, and from origin to insertion it feels as hard as if made of wood. Yet it is not contracted, and there is no tendency to wry-neck. She is obliged to hold her head quite straight, and cannot without pain and effort move it to either side. She is engaged as a schoolmistress, and states that in looking round on her scholars she is always obliged to be content to move only her eyes or to move her whole trunk. This peculiar condition of the muscle is believed to have been present for nearly two years, and was slightly preceded by a very peculiar condition of the overlying skin. I saw Miss C—— first in the early part of January, and have recently (April 1st) seen her for a second time. The condition both of skin and muscle was exactly the same on both occaions. Miss C—— is aged 44 ; she is very thin, and the skin of her face is patchy and covered with stigmata. At first I thought that she was the subject of scleriasis of the face, but subsequent observation did not confirm this impression. The skin on the left side of her neck overlying the lower two-thirds of the sterno-cleido, and bounded by a most abrupt line in the middle, in front, is reddened and somewhat brawny. It does not present conditions characteristic of morphœa, but looks rather like the coarse pig-skin condition which sometimes attends cancerous infiltration. Miss C——'s description of the early stage, however, leads me

to think that it was originally an ivory patch of morphœa. She says that she first noticed on her neck what looked like a cream-coloured scar, about the size of a halfpenny, but oval. This was two years ago, and not long afterwards the patch extended over the side of the neck, which became of a dull red colour. There is still some appearance of white lardaceous mottling. Miss C—— says that her neck is at times more inflamed than it is at others, and that it has sometimes been so painful that she has thought that an abscess was going to form. She considers that the affected part of skin is numb, but on testing its sensation with pricking it was difficult to prove this. She describes attacks of what she calls pins and needles in her left arm, after which the whole extremity will become numb and heavy. There is nothing much to note in Miss C——'s previous history except that she has been always very liable to catch cold and to lose her voice. In childhood she used to have attacks of inflammation of her hands, head, and face, which lasted some time, appearing in spring and autumn. These attacks may, perhaps, explain the peculiar condition of the skin of her face, but probably neither the one nor the other have anything to do with her present ailment. It seems probable that the latter is a form of morphœa, located chiefly by the spinal accessory nerve. I carefully examined the trapezius muscle, but found no rigidity in it; nor was there, so far as I could ascertain, any affection of the platysma myoides. It is the fact that in cases of morphœa affecting the extremities and attended with muscular rigidity or atrophy, there is not usually any contraction; the limb in these cases becomes, I think, simply stiff.

Postscript.—I saw Miss C—— for a third time on September 30, 1891. Both the skin and the affected muscle seemed somewhat softer, and her general health was improved. She had not lost her voice for six months.

No. XXXIII.—*Paralysis of Muscles following some weeks after an injury.*

I have had recently two curious cases under observation, in which paralysis of groups of muscles has followed on injuries

apparently very unlikely to produce such result. The first was that of a young lady who was sent to me from Devonshire. The surgeon who sent her said that he had treated her for a fracture of the carpal end of the radius caused by a fall on the ice. There had been from the first no material displacement, and the splints had been kept on only for two or three weeks. After their removal she had been allowed to use her hand, and had done so pretty freely. Suddenly some weeks after the accident, inability to use the extensors of her thumb had come on. The young lady's account to me was that after the splints were removed she could at first use her thumb freely. She had ridden on horseback, and managed her reins with that hand quite well. One morning on coming in from riding she put her hand behind her to unbutton her habit, and whilst using her hand in a somewhat strained position suddenly found that she could not extend the thumb. When she came to me the last phalanx of her thumb was constantly flexed, and she was quite unable to use either of the two extensors of the phalanges. The extensor ossis metacarpi she appeared to use well. Respecting the extensor secundi internodii it was easily demonstrated that she never threw its tendon into prominence. It was, of course, less easy to demonstrate this as regards the extensor primi internodii; but she certainly did not extend that phalanx.

She stated that after the loss of power in her thumb occurred, she had considerable pain and soreness in the back of the arm. The fall on the ice occurred on January 19th, and the arm had been three weeks out of splints when the sudden loss of power occurred.

No. XXXIV. — *Permanent partial Paralysis of Muscles following a sprain.*

A week later I saw another case which seemed to bear on that just narrated. The patient, a healthy middle-aged man, presented a distinct hollow on the outer side of his tibia in his left leg. The hollow was easily visible, and ran the whole length of the upper two-thirds of his tibia, close to the bone. It left the border of the bone much more conspicuous

than usual. It was clearly due to atrophy of the tibialis anticus, with possibly that of the extensor communis also. The girth of the calf measured three-quarters of an inch less than that of the other side (16 against $15\frac{1}{4}$).

On making him use the extensors of his leg, I found that he could throw the tendon of the tibialis anticus into prominence, and also those of the extensors of his toes. He did it, however, in a feeble manner, and not nearly so vigorously as with the other side. He was quite conscious of a defect of the foot in walking, but said that it had become much less than it had been in the first instance. He chiefly noticed it in going upstairs. He said that he could not put the affected foot so as to touch the step with the front of the sole; but had to be careful to put it well forward, so as to touch under the middle of the foot or near to the heel. The skin of the front of his leg was, he said, somewhat numb; and if exposed to the air a peculiar sensation of coldness was produced in it. The history, in explanation of this condition, was as follows: Mr. Van V—— was an engineer, and he had on one occasion assisted some men to lift a heavy stone. He felt that he had sprained his back, but nothing particular occurred at the time. When he got home, however, he had severe pain in the left lumbar region. The pain soon travelled down, and fixed itself in the front of the leg. He described it as having been for some days severe, "like a toothache in the muscle." He rested for a few days and then went about as usual, but for some months he could not walk well, as the foot "used to flat down in an odd way." By degrees in the course of the next year his walking improved up to its present state. The occurrence described was six or seven years ago, and after the first few years there had been no tendency to change. The skin of the leg had been in the first instance much more numb than at present.

The association of numbness of the skin with muscular paralysis and wasting, make it almost certain that in this case neuritis of the nerve trunk had occurred, and had disorganized that part of the anterior tibial which supplies the muscles affected. The disorganizing process must have occurred somewhat high up. We must note that from the beginning

the symptoms were restricted to the muscles and tract of skin finally affected. It is possible that in the original sprain, not the back but the muscles themselves were affected, and that the neuritis was an ascending rather than a descending process. Mr. Van V—— was not at the time of the sprain conscious of having hurt himself anywhere, but the pain followed very soon afterwards. He thought that the pain passed from his back down to the leg, but on this point he may have been mistaken. He had never had syphilis, and he did not present any other symptom of disease of the nervous system.

No. XXXV.—*Alarming attacks of Dyspnœa possibly due to tea—Diaphragmatic Angina?*

I saw with Mr. Hewer, of Highgate, and in consultation with Dr. Gowers, a gentleman who had suffered from some peculiar and very alarming attacks allied to angina. He was a rather delicate man of nervous organization, and with a history of gout in his family. He had recently suffered from rheumatic stiffening of his right shoulder-joint with secondary atrophy of the deltoid, and for this he had been under treatment by massage just before the attacks which I have to record occurred. Both of the attacks referred to had happened after breakfast. He had taken for breakfast eggs and bacon and tea. Mr. Hewer, who lived near to him, had seen him in both attacks, and had relieved him very speedily by the injection of morphia, and after the attack passed off Mr. M—— had appeared tolerably well again, though weak. The attacks had occurred on each occasion whilst in bed. Mr. Hewer described the attacks as very alarming, and said that the patient had a corpse-like pallor, and was apparently quite unable to make an inspiration on account of the severe pain caused by it. He said that it appeared to him that the diaphragm and chest muscles were fixed. He did not consider that the attacks were ordinary angina, since the pain was referred more to the epigastrium and lower part of chest than to the shoulder, and inability to inspire seemed to be the prominent condition. The pulse during the attacks was very

feeble, and the patient was only able to speak in a whisper. On the first occasion he expressed his belief that he was dying. On each occasion the attack had lasted, as I understood, about an hour, and was terminated by the use of morphia.

On asking the patient himself how the attacks came on, he said that on each occasion he had thought that his breakfast had disagreed and given him flatulence, his first feeling being a sensation of distension of the stomach, which soon increased to great discomfort and then to great pain. With the latter came a sense of inability to draw breath, and of impending death.

Dr. Gowers made a careful examination of the chest and heart, with, for the most part, a negative result; at any rate it did not reveal any organic disease of a nature to explain the attacks. The heart's action was feeble. The patient was admittedly a very nervous man, and one in whom all sorts of pain produced exaggerated results. Making, however, all allowance for this, there was no doubt that his attacks had been very alarming; for his wife and all who saw him, Mr. Hewer included, thought that he was dying. I was interested in noting that both the attacks had occurred just after eating a good breakfast in bed, and just after having partaken freely of tea, and, amongst other suggestions as to treatment, I advised strongly that he should not take any more tea at present. He was not a smoker, and was accustomed to take tea freely. I have known a cup of strong tea taken inadvertently in the afternoon produce attacks of breathlessness very similar, though not nearly so severe as those that he had experienced, and one of the ordinary symptoms produced by the disagreement of strong tea is, I believe, a sense of tightness behind the sternum with some feeling of difficulty of breathing.

The above notes were taken in 1888. In April of the present year (1891) I wrote to Mr. Hewer to ask if he could tell me anything as to the sequel of the case. In his reply he has informed me that the patient now enjoys good health, and has never had any return of the angina symptoms. He expresses his belief that in attributing them to tea we were

probably right. It is, of course, easy to suggest several fallacies. The attacks may have been due simply to flatulence, and not directly to the influence of tea. They may possibly have had some connection with the fact that the patient kept in the recumbent posture after a rather liberal meal. Neither of these suggestions is, however, very probable. I am rather inclined to suspect the tea itself, because, as already said, I have known other instances of somewhat similar effects, in which the sources of fallacy were fewer. A medical man described to me attacks which he felt tolerably certain had been caused by the incautious use of strong tea. On one occasion when going a railway journey he visited a patient very near to the station, and gladly accepted the offered cup of afternoon tea. The tea was very much stronger than he was accustomed to, and he took it without eating. Having driven straight to the railway station he got into his carriage without any hurry, but just as the train was starting he was seized with a most distressing sensation at the region of the heart, and felt as if he would be unable to breathe. He was obliged to open the window and lean forward with his head half out and his arms uplifted, and holding to the sides of the door. After half an hour in this position, with most distressing dyspnœa, the attack passed off. Its recurrence, though not with such great severity, but under very similar circumstances, made so strong an impression on his mind as to the cause of the attacks that for a long time he never ventured to drink tea except in his own house, where he knew its quality and strength.

The attacks described in Mr. Hewer's patient were not very dissimilar from those from which John Hunter suffered, and which he has himself so graphically described. To whatever cause we may incline to attribute them, they certainly afford examples of very alarming attacks for which no adequate organic explanation can be given.

SYPHILIS.

No. XXIX.—*The Crateriform Ulcer simulated by syphilitic indurations.*

The form of malignant disease of the skin to which the term "Crateriform Ulcer" has been applied is very peculiar, and usually fits well with what that name suggests. It is a heaped-up and more or less conical elevation with a broken centre. Its elevation is often very considerable, and so also are the induration and thickening at its base. At the same time the amount of breaking down in the middle is but small and the progress slow, so that no condition of a hollow with overhanging edges, such as is often seen in other forms of disease, is ever produced. I am anxious to describe these conditions in detail and to draw attention to them, because I feel sure that they characterize a very remarkable type of malignant disease. The only conditions under which they are at all closely simulated are in certain forms of syphilis. I have seen a few cases of syphilitic indurations breaking down in the middle, in which, had I not been certain of the history, I might easily have suspected that we had to do with a malignant crateriform ulcer. One of the most marked of these which is at present under my observation I will describe.

Mr. George F——, a gentleman in excellent health, aged 40, suffered from syphilis in 1876, fifteen years ago. He was repeatedly under treatment at Aix, the last time being in 1889. He came under my care in March, 1890, having a number of boils and little abscesses about his temples. I saw him for a second time on April 6th. At this date he had two large softened swellings near his right wrist. They were not pointing like boils, but the skin was reddened and shining, and I felt sure they would give way in the course of a few days.

He had at the same time what looked like a hard indolent boil on the left side of his forehead, and three others on the right temple.

On May 6th he came to me again, and I was astonished to find that the two abscesses on his wrist which had appeared to be on the point of breaking had entirely disappeared under the specific treatment. In spite, however, of that treatment, the furuncular indurations on his temple had increased in size and assumed crateriform conditions.

On May 12th I saw Mr. F—— again. In the interval he had taken his medicines quite regularly, but the indolent crateriform ulcers on his temples remained much the same. These ulcers had now rounded thickened bases, which were smooth and glossy. The area of ulceration in the centre of the elevations was in no case larger than a fourpenny-bit, and it was occupied by what looked like a depressed scab. I found, however, that it was quite impossible to detach this scab, since it consisted in part of sloughy tissue which adhered most firmly and could be neither washed nor picked away. There was no moist secretion whatever, and although the places looked inflamed and sore the processes were in a stage of absolute inaction, and scarcely changed from day to day. There were five of the indurations which I have described, four on the right temple and one on the left forehead. Mr. F—— had no other syphilitic manifestations whatever. It occurred to me as possible that the iodide of potassium might have had something to do with causing the peculiar conditions which the sores had assumed. Evidently it was not acting with its usual rapidity as a curative agent.

This supposition was in part supported by the subsequent result. I found that nothing did the indurations any good except liberal cauterization with the acid-nitrate of mercury. Under this measure they quite disappeared.

No. XXX.—*Gumma in the Iris in a girl of four, the subject of inherited syphilis.*

It is not often that we see uncomplicated iritis from inherited syphilis at any other period than during early infancy. A

few cases occur, however, later in life; of this the following seems to be an example. Mr. Tay was kind enough to send to me a little girl named E—— G——, aged four, who had on her right iris a beautiful salmon-tinted gumma. It was nearly as big as a pea, and was placed on the upper and outer part of the iris. It had been present nearly a month, and was attended by some dotted deposit in the posterior lamina of the cornea (keratitis punctata). The child did not herself present anything that was definite as regards syphilis, but there was a history that she had had snuffles in infancy, and that when eighteen months old she had sores at the anus, "of the nature of piles." She frequently complained of aching in her legs, and the surfaces of her tibiæ were a little lumpy. Her forehead and physiognomy, though not characteristic, were decidedly suspicious. The family history was that her mother had had six children. The first died at four months of thrush; the second died at ten months, cause unknown; the third was a premature birth; the fourth a healthy child, still living; the fifth our patient; the sixth a baby, aged sixteen months, apparently healthy.

No. XXXI.—*Tertiary Syphilis—Induration of prepuce—A peculiar form of Syphilitic Lupus.*

Amongst the cases of syphilis which have recently given me most trouble in treatment is that of a Mr. W——, who has been under my care now for two years. This gentleman was sent to me by Mr. W——, of Birmingham, and it is needless to say that he had already been most carefully and judiciously treated. The difficulty had been that he was extremely susceptible to the influence of remedies; very small doses of the iodide sufficed to cover him with an eruption. He was in the sixth year of his syphilis when I saw him, and presented symptoms of the tertiary group. He had for nearly a year past been troubled with ulceration and swelling of his prepuce. A large hard-edged induration occupied almost the whole of its outer part, producing great deformity. In the middle of it there was an unhealthy ulcer, and several scars near to its edge. It was clearly of the nature of syphilitic lupus, but the

amount of induration was unusually great. He said that it was not possible that this sore had resulted from any fresh infection. This had been my first suspicion on seeing him. The fact that it had persisted in spite of treatment for more than a year was, of course, in favour of his statement that it was a relic of his old disease. Mr. T—— was a man 33 years of age, of pale complexion, and considerably out of health. His face was covered with iodide-acne, and he brought with him a letter from Mr. W—— telling me that he was so susceptible that he could not bear small doses, whilst, on the other hand, he had often taken half-drachm doses with but little disagreement. He was not liable to iodide coryza at all, but always got acne. With this history I suggested that we should try the three iodides in combination and in very small doses. My prescription was three grains each of the iodides of sodium, potassium, and ammonium, with half a drachm of sal volatile three times a day. He was to use iodoform, both in powder and ointment, as an application to the prepuce. This was on Oct. 21st, 1890. I saw him again on November 17th, and was told that my small doses had, as before, produced acne. Whether under their influence or under that of the local use of iodoform, I cannot say, but the induration in the prepuce had entirely melted away, and the ulcer was soundly healed. We agreed that the treatment should be modified from time to time according to any tendency to relapse that might be shown, and that he should, as far as possible, abstain from the use of iodides. I did not see him again till March 12th, when he came on account of a large and very peculiar sore which had developed on his left cheek. His prepuce remained quite well, and he had no other syphilitic symptoms. The sore on the cheek was oval in form and as large as the section of a small egg. In its middle was a very unhealthy-looking ulcer, but the greater part of it consisted of a raised, rather firm, bossy edge. It was somewhat similar in character to the sore which had formerly been present on his prepuce. I applied the acid nitrate of mercury freely to the ulcer, and ordered iodoform ointment. As it had not yielded to the iodides, but had in fact continued to develop during their use, I suggested that

they should be discontinued and that he should take two drachms of the bichloride of mercury. Under these measures the sore on the cheek healed in the course of a few weeks. Now, however, occurred a new symptom. Mr. T—— was attacked rather suddenly by very severe pain over the outer condyle of his left femur. He came to me again on April 7th, and described this attack of pain as having been a very severe one There had been, as he believed, but little evidence of swelling, yet the tenderness was extreme. He had been quite unable to sleep at nights, and had dreaded the slightest touch on the part.

As he was taking mercury at the time that this pain began, Mr. W—— had very judiciously left it off and substituted the iodide. Apparently under the influence of the latter the pain on the bone passed away, but the sore on the cheek returned. When I saw him on April 7th his knee was almost well, and I could not detect any swelling whatever. But his cheek was in a most threatening condition, a large patch being dusky, red and swollen. The part involved was the same as that which had been originally diseased. It appeared to me very probable that the iodide had really caused the condition described in the cheek. He was covered both on face and trunk by acne, which was undoubtedly produced by the iodide. At the same time it seemed almost certain that the iodide had cured a local periostitis, over which mercury had shown no power, and concerning which it might almost have been suspected that it had done mischief. Under these circumstances the only course left open seemed to be to try the two in combination. This, however, had often been done before, and usually with only partial results. I may remark, in reference to this case, that it is just one of those in which I should have liked to have sent the man to live for a long time in a bracing seaside air. This measure of treatment, however, was one which he could not adopt, as he was obliged to continue at his business.

No. XXXII.—*Uncured Syphilis with early development of Tertiary Symptoms.*

An example of irregularly-developed syphilis occurred in the case of a man named H——, who was sent to me by Dr. Leslie, of Canning Town. This young man (æt. 26) had three large lupoid ulcerations on his face and forehead, and another large and very unhealthy ulcer on one leg. He had only just got rid of an attack of orchitis, and the testis was still somewhat swollen. Yet it was only about sixteen months from the beginning of his disease. His original sore was treated at sea. It was on the skin of the penis, and never itself assumed an unhealthy condition. It was attended by enlarged glands, and followed by a general eruption and sore throat. He had interrupted treatment by mercurial inunction and iodides. During the last six months his treatment had been more continuous. I prescribed the three iodides and cauterised all the sores. In a month they were almost healed.

No. XXXIII.—*Fire-stains on the Legs in an exaggerated form—Syphilis some years before.*

We are all familiar with the dark brown or purplish mottlings seen on the fronts of the legs of those who have been sitting over the fire. I have been accustomed to call them fire-stains. Sir Erasmus Wilson's portrait, No. M., gives an excellent representation of them. The arrangement of the discoloration is neither in patches nor in circles, but is like the mottling which occurs in the skin of a corpse or on a dappled horse. The subjects of this discoloration are usually enfeebled persons, who have suffered from some chronic disease attended by great chilliness, or perhaps from ague itself. They have usually sat for long periods cowering over the fire. Yet that this exposure to fire heat is not the invariable cause may be inferred from the fact that we now and then see this condition when there has been no such exposure. My reason for mentioning it now is in order to ask whether the previous occurrence of syphilis does anything in predis-

posing to it. A gentleman who recently consulted me, showed it in a most exaggerated form. The dapplings on his legs were almost black. He had not suffered from any illness, nor had he in the least failed in vigour, but he admitted that he was a great lover of the fire, and that during the recent cold winter he had sat over it a great deal. The discolorations had began on his right leg, but had soon after appeared on his left also, and were now almost symmetrical. They caused him no inconvenience, but he was anxious about them because he feared that they were an indication of syphilis. I had treated him for syphilis about six years ago, but he had for long appeared quite well, had married, and had healthy children. In spite of this history it is, however, quite possible that his former disease may have done something to predispose to the development of these curious stains. We may nevertheless regard it as certain that they are not often due to syphilis in any active sense.

Wilson's portrait, to which I have referred above, is named "*Melanopathia syphiliticum*." In that case the diagnosis of syphilis was clearly justified, and the stains appeared in the secondary stage. Wilson writes, however, concerning it: "At first glance the peculiar mottling of the legs recalled to my mind the discoloration so frequently seen amongst the lower class of women in Paris, and attributed to the constant use of the chauffrette—the *ephelis ignealis* of the French authors." The young woman who was the subject of the case had not used any artificial warming apparatus of this kind, but as the notes state that she was very feeble and suffered much from headache, it is very probable that she had been chilly and had sat very near the fire. I have seldom myself seen such dark stains excepting in those who had done so. Although I fully admit the frequent influence of syphilis in predisposing to them, I much doubt whether they often occur without the application of their usual exciting cause. It is ordinarily an instance of partnership.

What I have described as "coffee-stains" on the legs are allied to fire-staining, but have probably a much more frequent and close relationship to syphilis.

No. XXXIV.—*Chancre on the cheek not to be distinguished from a soft sore—Large suppurating Bubo.*

Dr. Ludwig, of Finsbury Square, brought me a very interesting case of chancre on the face. The sore was a little external to the left commissure of the lips. It was an ulcer about as big as a fourpenny-bit, with soft inflamed edges, and covered with a pus-scab. There was not the slightest approach to specific induration about it, and nothing in the least suggestive of its true nature as an infecting chancre. Dr. Ludwig, whose skill and experience are both of them great, had not entertained a suspicion as to its specific nature until a rash appeared. A few days before the patient was brought to me he became covered with a papular and scaly rash, about which there could be no mistake. Not only was the ulcer much more like what is popularly known as a soft sore, but the bubo corresponded with it. The latter was a large mass as big as a fist, which concealed the angle of the jaw, and which had been very painful. It was on the point of suppurating, if, indeed, it had not already done so.

This case may be added to many others on record in proof that the identification of chancres on other parts than the genitals is often very difficult, and that the phenomena which are supposed to be distinctive between hard and soft sores are often mixed.

No. XXXV.—*Syphilis communicated from husband to wife after a long interval.*

I have recently seen a lady who married a man in whom syphilis had occurred nearly two years before. Her husband had been almost the whole of the two years under treatment, and for a year before his marriage he had presented no symptoms excepting an occasional sore on the tongue. The disease was in him completely suppressed and, as he thought, cured. Yet within a month of marriage his wife had a sore with an indolent enlarged gland in the groin, and a month later a transitory erythematous eruption. I did not see her till three

months later, when, under the influences of small doses of mercury, all her symptoms had completely disappeared. At this date her husband appeared to be quite well; but he admitted that soon after his marriage he had had a little abrasion. There seemed to be no doubt that he had really given his wife syphilis. The question is, will the virus when in a state of all but complete suppression by specifics produce a full development of the disease? The wife has as yet had it very mildly.

I feel it a duty to record the above case because it is very exceptional to my general experience, and all but contradicts the clinical rule that a man may marry safely if two years have elapsed from the beginning of his disease. It must be understood that the patient had not received my permission to marry, nor had two full years elapsed. The interval was only about a year and nine months. If the facts were as they seem, the husband excoriated his penis soon after marriage, and the secretion from the excoriation proved infective and caused a primary sore in his wife. It is not a case of begetting a syphilitic child, but of direct infection from intercourse. I have known many instances of after-marriage excoriations proving infective, but never one in which the interval had been so prolonged as in this. There are, of course, several possible fallacies, but I am inclined to believe that the facts are trustworthy. They may certainly be allowed to inculcate caution, and to suggest that the two years' rule should never be relaxed in the least.

No. XXXVI.—*Transmission of Syphilis from husband to wife after (as alleged) a very long interval in the former—Disease of palate in the latter after long latency of taint—Healthy children.*

A case which I saw in consultation recently (July 21, 1891, afforded an interesting illustration of the long latency of syphilis. A married lady, aged 31, was brought to me with a large ulcer in her palate exposing the bone. It had followed

on a periosteal gumma which had begun by nasal discharge, attributed to influenza about four months previously. The patient had the appearance of excellent health. She had been married about nine years, and told us that a few months after her marriage she was ill with a general eruption which was called "blood-poisoning." It lasted some months, and a year later her first child was born dead at seven months. After this occurrence she regained good health, and had ailed nothing until her palate trouble. She had borne three other children (two girls and a boy), all of whom were living and healthy. Dr. P——, who came with her, assured me that none of them had ever shown any signs of inherited taint; the eldest, however, was only just six, and had not as yet cut his permanent incisors.

The husband of this patient freely admitted having had syphilis. He asserted, however, that it was twelve years before his marriage, and said that he had been assured by his medical adviser that he might safely marry. Now the evidence in his wife's case clearly points to a sharp outbreak in her of secondary symptoms soon after marriage. In all probability she then had a primary sore. It is not in accordance with general experience that such a severe attack could be the result merely of conception by a syphilitic husband. I therefore take permission to doubt the husband's statement, and to believe that he had really had a fresh attack of syphilis not long before his marriage and that he infected his wife with a primary sore.

DISEASES OF ARTERIES.

No. XI.—*On Senile Conditions of the Arteries—Local Limitation of Calcareous Changes.*

The state of the arteries in the case of my friend Dr. E—— was of great interest and peculiarity. I had to visit him when he was lying very ill in the country. Upon attempting to feel his pulse I was astonished to find that there was no beat whatever to be discovered. As he was not in any degree of collapse, and as his face was florid, I thought at first it must be an instance of the irregular distribution of the radial. But on careful examination of both wrists I found them exactly alike, and could discover no irregular trunk. His pulse could be easily felt at the back of the thumb, between the meta-carpal bones, and here the artery was of good size—in fact, larger than natural, and had a forcible beat. At the wrist the radial was in such an advanced condition of calcareous degeneration, that it was only on the most careful examination, and even then doubtfully, that any pulsation could be detected in it. I examined his brachial arteries, and found them of rather large size, and pulsating freely. There was not the slightest tortuosity of the arteries anywhere. His femoral arteries were very considerably enlarged, and were probably to a considerable extent affected by calcareous degeneration, as they felt somewhat rigid. They were perfectly straight, and could be traced as far as Hunter's canal with perfect ease. On the foot I could feel the dorsalis pedis pretty easily, and it did not appear to be calcareous. I could not find the posterior tibials at all. The skin of his feet was uniformly white, but in a good state of nutrition. There was a black spot of dry gangrenous skin on the pulp of

the left great toe. Around this there was not the slightest trace of inflammation nor the least pain. He thought nothing of it, and would not have shown it to me had I not discovered it by accident. He said it was caused by his having touched the hot-water-bottle, but his wife assured me that the bottle had never been put into his bed excepting when protected by flannel. We may assume, then, that the state of his circulation favoured the very easy production of gangrene, and that too without the intervention of any inflammatory process.

I examined the temporal arteries and found them soft, not much enlarged, nor unusually tortuous. Upon an anterior branch of the left there was a little soft tumour the size of half a hazel-nut, which pulsated, and was possibly a cirsoid aneurism. There was not the slightest trace of arcus senilis. We had operated on his right eye for cataract about two years ago with perfect success, and he had now a ripe cataract in the other.

The subject of the above narrative was a short, thick-set man, aged sixty-six, who was about to die from hepatic anorexia and sheer debility. He had led a very active professional life, but had through the whole of it taken beer and spirits much too freely. Wine he had never touched. His liver was very large and very hard. Through the latter part of his life he had been a man of somewhat bloated aspect, with dilated veins on his nose and cheeks (a coachman's face).

The fact was new to me in connection with the above case that it is possible to have a locally restricted form of calcareous degeneration. It will be seen that the radials were bony tubes which could not be felt to pulsate. Almost suddenly, as the artery turned over the wrist, this calcareous condition ceased, and the vessel was felt to be large, soft, and of full pulsation. I had a second opportunity after the above notes were written of verifying my observation. I found then that although the radials at the wrist were much alike, and both quite without pulsation, that the condition advanced lower down on the left than on the right side. On the right pulsation could be detected in the last inch of the vessel in front of the wrist, and its gradual diminution could

be traced until an inch higher it was quite lost and the vessel became a small rigid tube. On the other side no pulsation could be detected, as stated in the text, until just as the vessel turned over the lateral ligament to gain the metacarpal space. Thus the part involved in advanced degeneration was probably only a few inches in length. I could not feel quite certain as to the condition of the ulnars, but I believe they were calcareous also. The brachials, as stated, had suffered but little. I suspect that it is according to rule for the arteries of the fore-arm and leg to suffer from calcareous degeneration more than those of other parts, but I believe that it is generally held that the change passes on from them to be vessels of the hand and foot.

The case proves that a vessel so far advanced in calcareous degeneration that no pulsation can be felt in it may yet transmit the blood-stream with sufficient force to give very vigorous pulsation in the vessels beyond the affected tract.

As regards the causes of calcareous degeneration, probably the case is an example of what is usual. Senility is the real and the only essential cause, but it is much helped by the free use of alcoholic beverages. I have made a few searches for it in very old dogs and horses, but have not found any trace of it.

No. XII.—*Senile Hypertrophy of Arteries in a total abstainer without calcareous changes.*

A case which in some respects I may contrast with the preceding one was that of a gentleman, aged seventy-two, who has been a total abstainer all his life. I was consulted on account of strangulated hernia, and was warned by his medical attendant that he had extensive disease of his heart and arteries, and would be a bad subject for chloroform. Notwithstanding this, as the anæsthetic was needed, we at once administered it, and he took it quietly, without the slightest undue disturbance of his circulation. The statement as to his pulse, however, was quite correct, for he had a most extraordinary condition of senile enlargement of his arteries. They were neither tortuous nor calcareous, but

simply enlarged and thickened. His radial of both wrists felt almost as large as a cedar-pencil, and beat vigorously. There was an intermission at every six beats. So far as I examined him I believe that the enlargement of the arteries was general, although not to so great an extent in other parts as in the radial. There was no murmur in connection with the heart, but it was probably somewhat enlarged. If we now ask as to the influence of this state of the arterial system on the patient's health, I have to record that its subject was a man who might be considered an example of perfect senile vigour. He was tall, thin, and florid, with a beautifully clear complexion, and not the slightest trace of duskiness. I believe he had never suffered from any discomfort at his heart. He was accustomed to take a daily journey from the suburbs to his business-place in the city, and he could walk well. His boast was that until his present illness he had never spent a day in bed.

This case may be considered to prove that senile hypertrophy of arteries is not in any way secondary to other disease, that it has no connection with the use of alcohol, and is not necessarily attended by any inconveniences.

No. XIII.—*A Syphilitic Gumma around the Femoral Artery—Permanent obliteration of the vessel—Details of the Arterial Anæsthesia which attended the onset of the attack.*

In December, 1886, I was consulted by a solicitor aged 53, whom I had long known as the subject of tertiary syphilis. His original disease had occurred during student life. He was a tall, spare man of feeble circulation, but in tolerable health. He had been under my treatment in the previous year for a large gumma in the subcutaneous tissue of the left calf, which I had diagnosed as peri-phlebitic. This had entirely disappeared under specific treatment. He now came to me on account of numbness and coldness in his right foot and leg. He thought that it was partially paralysed, and complained that he was obliged to be constantly moving the foot on account of a sense of restless discomfort.

His history as regards his recent attack was that about two months ago (on Nov. 5), suddenly, whilst sitting in his study, the whole foot and leg had become numb with a sensation of pins and needles. He rose from his chair, but could only "hobble about," and from that time he had never been able to walk freely. The foot had remained numb and painful, and the pain did not leave him even in bed. The foot was so restless that he could not keep it still, and was obliged to get out of bed and move about. In spite of this discomfort, he had no tenderness anywhere. He directed my attention to a considerable fusiform swelling in the mid-thigh along the course of the vessels. It was not in the least painful, and he said that he had found it out by accident about two months before the attack of numbness to his foot. I felt no doubt that this swelling surrounded the vessels and was of the nature of a peri-vascular gumma. It appeared probable that it had at length been attended by thrombosis of the femoral artery. It is to be noted that the whole foot was implicated in numbness. Subsequent observations confirmed the diagnosis suggested. Under specific treatment the swelling soon began to diminish, and I then made it certain that there was no pulsation in the femoral lower than about an inch below Poupart's ligament. It felt like a solid cord. The vessel of the opposite limb beat freely. His right foot was usually a little dusky and more cold than the other, and if not dusky was very pale. I could not find either his anterior or his posterior tibials, but his general circulation was so feeble that I had much difficulty in doing this even in the sound limb.

We continued the iodides and mercurials for two or three months regularly, and I then lost sight of my patient.

Five years later (in October, 1891) Mr. P—— again called on me. It was now on account of some aching pains in his limbs and other symptoms which might be premonitory of ataxy. He had never regained the power of walking much. His legs, the right especially, soon tired. When standing he always rested the right knee on a chair. All trace of the swelling in the thigh had long ago vanished, and during the last four years he had experienced no recurrences of syphilitic

symptoms. There seemed no doubt that the right femoral was obliterated. Its pulsations in the groin were very weak, and I could not feel them lower than about two inches. Below this I could not in any part of his limb detect any artery. The foot was dusky, especially about the toes, and all the nails were much thickened. Beyond these there were no lesions of nutrition.

No. XIV.—*Arteritis and rapidly advancing dilatation of the ulnar arteries in a diabetic lady—Remarkable sinuosity of the affected vessels—Symmetry—Arrest of the changes.*

On April 19, 1890, I received from my friend Mr. Debenham, of Heath House, Commercial Road, a letter of which the following is a part:—

Dear Mr. Hutchinson,—I would like your advice upon a case, a Miss T——, æt. 70 or thereabouts, the subject of diabetes, in whom ten days ago a swelling occurred in the bend of the right elbow. It had the feeling of a varix, was not painful, but caused discomfort. A day or two afterwards it had extended both upwards and downwards in the limb, and it appeared to have become quite superficial. Since then the brachial can be felt to be hardened and tender. It caused aching when the forearm was lifted or the hand much used. She had had no injury.

Two days since, a precisely similar condition began in the ulnar of the *left* forearm, and to-day the brachial just above the elbow pulsates in a similar manner. It gives one the idea that the muscular coat of the vessel is lost, and that aneurisms may follow. The changes seem to have been very rapid.

With kind regards, yours very truly,

Robt. Debenham.

P.S.—To-day there is a *little* pain in the right elbow (front) for the first time.

Mr. Debenham's patient was an old lady of 73, but looking much younger. Her hair was still brown. She was spare, but had not a senile appearance. Her skin was very thin and atrophic.

The most conspicuous arterial change was in front of the left wrist, where the ulnar artery presented itself just under the thin integument as a sinuous coil which pulsated very freely. The length of this coil was almost three inches from the wrist upwards. The vessel was apparently nearly as

large as a cedar pencil, and it made two twists, the coils touching each other. Higher in the forearm it was not easily traced, but at the bend of the elbow the brachial was somewhat enlarged, and so up the arm. It was everywhere a little tender, but there was no redness, nor any very definite thickening of parts. The skin moved freely over the vessel. In examining her hand I found that the superficial palmar arch was enlarged, and that it pulsated so freely that it was easy to count the pulse, not only by the finger but by the eye. Miss T—— said at once, "Oh, I have known of that for some time," and on our pressing for exact dates, she thought that it had been present three months at least, and added that the palm had been tender, so that she had been obliged to give over carving because the knife-handle hurt her. She was sure that this palmar pulsation had been present before that on the wrists.

In the right arm the chief arterial varicosity was at the bend of the elbow. It implicated the brachial, but passed down the ulnar also (or rather perhaps up it). The ulnar could be traced from the bend of the elbow through the upper third of forearm, and was here so superficial that Mr. Debenham could not well be convinced that it was not an abnormal branch. I was sure, however, that I could trace it dipping under the muscles and feel it slightly all the way to the wrist. The varicosity at the wrist was not nearly so great as on the other side, but the palmar arch could easily be felt. In neither forearm was the radial artery in the least enlarged, and on neither side could the radial be found between the thumb and forefinger. The radial pulse was rather small, and presented no peculiarity. The artery was not calcareous. The temporal arteries were neither dilated nor visibly sinuous; indeed I could scarcely find them during the short examination which was all I could make.

There were no defects in the circulation in any of the fingers, and none of the digital branches were involved in the dilatation. The fingers were warm, and not in the least dusky. I could not find the digital arteries.

The symmetry is to be noted, both ulnars being affected and both radials quite free. The disease appeared to have

travelled upwards, and had probably begun in the ulnar on both sides and passed up to the brachials.

I did not myself see the patient again for more than a year, as she lived at a distance, and was too ill to come to my house. The following letters from Mr. Debenham will serve as records of her progress.

July 15, 1890.

Dear Mr. Hutchinson,—There has been but little change in the tortuous vessels, unless the right ulnar has become still more tortuous. The radials remain good, and I can find no hardness in them.

I accidentally found (without any expression of discomfort from my patient) that a similar tortuous artery existed on the outer side of each forearm—only evident at one point, so that I could not trace the source. They are nearly symmetrical, but not quite so, and are not tender, as the others were when recent; so probably they are not fresh.

There is a good deal of uneasiness, at times, in the forearms and along the brachial, but this is very variable. It is worse after any exertion, but happens often without apparent cause. Touching the forearm against a table in playing at chess causes pain. There is much discomfort in wearing gloves; even thin silk ones are uncomfortable.

She is certainly thinner, and there has lately been an increase in her diabetic trouble, but beyond this nothing fresh has developed.

I will let you know if any further change occurs.

Yours truly,

Robt. Debenham.

Dec. 15, 1890.

Dear Mr. Hutchinson,—After an absence of several months, I have to-day seen the lady of the tortuous arteries. She reports that the tenderness of her arms has been less, and she can work again with her needle, but sudden jerks—such as throwing a piece of paper on the fire—will cause her considerable pain. In appearance the vessels are less distended, and the pulsations less marked, but she says this is variable. The most marked change is in the brachial just above the right elbow, which is very hard, and requires heavy pressure to stop pulsation in it. The rest of the tortuous arteries remain apparently unchanged at present. Her general health is no worse.

Yours very truly,

Robt. Debenham.

I visited Mrs. —— with Mr. Debenham on December 11, 1891, in order that we might ascertain the exact condition of her arteries. It was now twenty months since my original note. The change was most remarkable, the dilated arteries having very much diminished in size, in tortuosity, and in vigour of pulsation. The same conditions were present, but very much less in degree. The ulnar arteries were still much

larger than natural and could be easily traced down the forearm, and presented visible pulsation just above the wrist. But their condition was not such as would have attracted attention on a superficial examination, whereas on the former occasion it was very conspicuous. In both palms the superficial palmar arch could very easily be felt, and in the left, if the hand were held in a proper position, it was even visible. Its pulsations were in both hands controlled by compression on the ulnar and were scarcely influenced at all by pressure on the radial. The radial artery was, as on the former occasion, not in the least dilated, and although the patient's hands were thin and the skin in a state of senile atrophy, I could not find the radial between the metacarpal bones behind, nor could I detect the superficialis volæ. There was no evidence of calcareous change in the coats of the vessels. In both arms the conditions present in the ulnar arteries passed upwards to the brachial. Thus at the bend of the elbow the brachial was quite superficial, somewhat tortuous, and easily visible. On the right side it was so superficial that it could be easily taken in a fold of the thin integument. Through the whole length of the upper arm the vessel was very evidently enlarged, more superficial than usual, and its coats thickened.

The patient on this occasion confirmed her former statement that the dilatation of her arteries had set in quite suddenly and with definite and considerable tenderness over their course. She thought that the interval of the attack in the one hand and the other had been only a week or two, and for a time her hands had been disabled. During the last year she had been able to use them again almost as well as ever, but she was still very sensitive to the pressure of any hard substance in her palm. Thus she showed me how in carving she was obliged to let the end of the handle of the knife rest against the pisiform bone, as it gave pain if it touched the hollow of the palm.

I cite this remarkable case in conjunction with others as proof that the arterial changes which occur in senility may be local. In this instance the changes were a form of inflammation of the arterial coats attended with tenderness

and productive of dilatation and tortuosity. The case also proves what *a priori* might have been thought most improbable, that changes of this kind may undergo a sort of retrocession. I should not have thought it possible that an artery which had become sinuous could ever again straighten itself, yet most undoubtedly something of this kind had occurred in this instance. The symmetry of the changes, and their occurrence on the two sides almost simultaneously, are also features well worthy of note. I have repeatedly mentioned in print a case in which an old gentleman had simultaneous and symmetrical arteritis of his temporals, which quickly ended in their occlusion. In this instance, however, the reverse of occlusion took place, although there seemed reason to believe that the changes in the first instance were inflammatory. Instead of occlusion, the arteries implicated became dilated with thickening of the walls. Very probably the conditions were those in which thrombosis of the vessel might very easily have occurred. Had there been a tendency on the part of the blood to coagulation, we should probably have had thrombosis of the vessel spreading upwards and producing gangrene of the hand (see ARCHIVES, Vol. I.).

I well remember amputating the upper extremity of an old man on account of gangrene, produced by precisely this state of things.

No. XV.—*Multiple Aneurisms in the lower limbs in an old man—Senile Gangrene of Toes—History of an attack of Arterial Occlusion some years ago.*

I went to Dorking one evening in the beginning of October, 1890, to see, with Mr. Chaldecott of that place, an old gentleman of eighty who had gangrene of the toes of his left foot. Mr. Chaldecott told me that he had also aneurismal dilatations of both popliteal arteries, and that there was a very curious history of his having had symptoms indicating arterial occlusion four years ago, from which, after a severe illness,

he had recovered. Mr. B——, our patient, was a rather spare, white-headed, healthy-looking old man. He said that he had enjoyed very good health through life. Four years ago his left foot had suddenly become pale and tallowy; the toes were dusky, and the medical man who attended him told his wife that the foot was going to mortify, and that there was little or no hope of his recovery. Considerable constitutional disturbance attended this illness, and there was some delirium for several days. Ultimately, however, recovery took place, and no actual gangrene of the toes occurred. The old gentleman was afterwards able to walk about again, but his foot was permanently colder than the other. The attack for which I was consulted had come on gradually and with but little pain. In the same foot (the left) which had been formerly attacked, the ends of all the toes had become black and mummified. The process was not extending at all rapidly, and but comparatively little constitutional disturbance attended it. The whole foot was dusky and mottled, but there was not the least swelling. The posterior and anterior tibials, which were easily felt in the opposite foot, could not be found in this.

As regards the aneurisms, the following are the facts. In the left popliteal space, and passing upwards from it on the back and inner side of the thigh, was a long fusiform pulsating swelling. The pulsation could easily be felt certainly as high as Hunter's canal, and the whole artery appeared to be involved in an even dilatation. The pulsation was very forcible. It was difficult to estimate the exact size of the artery, but it certainly felt to be not less than an inch across in the popliteal space. Below this fusiform tumour and immediately under the upper part of the gastrocnemius, there was another aneurism, the long axis of which was crosswise of the limb. Its pulsation was very vigorous, and could easily be felt on both sides of the leg. In the opposite popliteal space there was a large fusiform swelling which again extended at least as high as Hunter's canal. In both thighs from the groin downwards the femoral artery was considerably dilated. It may be noted as a peculiarity in this case that there was no evidence of dilatation of the arteries in the upper limbs or

in the head and neck. The radial artery was of moderate size, had a full pulsation, but was not in the least tortuous; nor, as far as the finger could estimate, was it calcareous. The temporal arteries were less tortuous than is usual in old people. As regards the cause of the gangrene, it may be suggested as probable that occlusion of the posterior and anterior tibials (one or both) occurred suddenly four years ago, and was permanent. The collateral circulation had been sufficiently re-established to permit of the foot retaining its vitality, and of the patient being able to walk. The final attack of gangrene four years later was not improbably in connection with occlusion of some of the collateral branches. The larger size of the aneurisms on the left side than the right was probably consequent upon the distal impediment to the arterial circulation.

MISCELLANEOUS CASES.

No. XLI.—*Nodular Thickening of Hands, &c.—Inherited Gout—Alliance with Xanthelasma.*

Miss U——, now aged eighteen, was brought to me by Dr. T——. Had not suffered from any particular disease excepting quinsy. Began eighteen months ago to suffer from patches on her elbows. Her hands soon after became affected with little indurations in the skin. She also had patches in the psoriasis position on the fronts of the knees. A lump also formed on one heel. Thus far the elbows, hands, and one heel have been the only parts affected. She is one of twelve, all living; two have suffered from infantile jaundice.

The family history is of strong inheritance of gout, and of torpid livers. Many members of the family have suffered from the latter, and her paternal grandfather died of gall-stones, having suffered from jaundice.

Present condition.—On the elbows and knees there are groups of ill-defined papules on congested skin. On one knee there is little more than a patch of congestion, the tubercles being very ill-marked. On the heel there is little more than a patch of inflamed skin such as might have been caused by chafing. It is just over the attachment of the tendo-achillis. The hands present conditions which are almost symmetrical; lumpy and nodular thickenings are seen in the skin of all the fingers. Some of these lumps are quite isolated, glossy, and semi-transparent, but others are more deeply placed and less defined. In both hands the ring finger has almost wholly escaped. The symmetry is not, however, exact, for in the left hand the middle, ring, and little fingers have almost all wholly escaped.

In the right hand the little finger is severely affected. The right thumb, middle and index fingers, and left index finger are those most affected, and in these the subcutaneous nodules are so numerous that they are almost confluent. None of the nails are in the least affected. In each hand, a patch passing up from the base of the palm to the index finger is very conspicuous. In the left hand, on the ulnar border just above the wrist, is a large thick induration which has no representative in the other. There is no yellow xanthelasma-deposit in connection with any of the growths. With the exception that this feature is absent, they much resemble what is seen in tuberous xanthelasma.

Miss U—— says that her hands frequently burn and smart. She has recently been advised to take port wine, and says that it distinctly makes the lumps worse. She is a tall, well-grown girl, but pale and of a somewhat feeble circulation. Her case is evidently a partnership of tendencies to gout and xanthelasma, with possibly a tendency to psoriasis also. The nodules are those described as rheumatic nodules, but they become much more superficial and cutaneous like those of xanthelasma. They are in the positions, in part at least, which are affected by psoriasis and also by xanthelasma. The severity with which her fingers have suffered must probably be attributed to her feeble circulation. An opinion has been given that the disease is of the nature of sarcoma, and likely to run a malignant course. This I do not in the least believe. It is very probable that it is allied to the remarkable case published by Dr. Judson Bury, to which I have referred at p. 301 of ARCHIVES, Vol. II.

No. XLII.—*Chronic Inflammation of Vas and Epididymis—Malversation of the Testes.*

A gentleman named L—— came to me on the evening of December 23rd, 1890, on account of disease of the testes. His condition was very puzzling. He had already been seen by a hospital surgeon, who had given him the diagnosis of tubercular disease of the testes, and advised their immediate removal. He had also been seen by another medical man,

who had comforted him by the assurance that castration was not necessary, and that he would get quite well if he would adopt a strictly vegetarian diet. This he had done for about six weeks, with the result that he had lost at least a stone in weight. He was a married man with three children, and his sexual functions were, he said, in full vigour. His age was only 36, and the proposed removal of the glands was therefore to him a very serious matter. I am not quite sure that the surgeon who advised it intended to remove both, but this was the patient's impression, and both were affected.

Condition of the Testes.—It was the left gland which was chiefly affected. It was enlarged, and on the front part considerably indurated. Behind it there were several nodular projections, about as large as hazel-nuts. These fluctuated, and there was evidently some fluid in a cyst at the upper part of the gland. The vas deferens was as thick as a crow-quil, and almost as hard. Its indurated condition could easily be traced as high as the external ring. It might be suspected that the nodular projections described at the back of the testis had been supposed to be in the epididymis, and had thus supported the diagnosis of tubercular disease. On tracing the vas, however, I found that there was a peculiar anatomical condition, and that the testis was placed with its epididymis in front. It partook in the general induration which I have already mentioned, and was adherent to the gland; but there was nothing in it of a lumpy character like tubercle. The cysts at the posterior part were clearly in connection with the gland itself, and, therefore, probably not tubercular. The malversation of the testis was the same on both sides. The testis on the right side was liable to ache at times, although nothing more could be detected in it than a slight induration of the epididymis.

As regards the propriety of excision in this case, even on the supposition that there was tubercular disease in an early stage, I cannot but think that infective spreading could scarcely have been prevented, seeing that the whole length of the vas was already indurated. My opinion was, however, that the case was one of chronic inflammation of the vas, epididymis, and gland, consequent on prior orchitis, and not one

really of tubercle. At any rate, the diagnosis of tubercle was not to my mind sufficiently established to justify removal of the testis in a young man.

No. XLIII.—*On Sleep and Waking.*

Raynaud mentions the case of a lady who was suffering from symmetrical gangrene of her digits, and who usually, on account of the pain, slept very badly. He writes, "When the patient succeeds in sleeping two or three hours, her sleep is extremely heavy, and on waking she remains two minutes without knowing where she is." For this it was recommended that her attendants should wash her face with cold water as soon as she was awake.

An elderly lady complained to me that she was quite unable to open her eyes on waking. She said that she was absolutely compelled to use her fingers, although the lids were not in the least stuck together, and for some little time she was obliged to hold them open in order to see. I inquired whether this occurred if she took a nap in her chair as well as when in bed. She said that it did, but to a very much slighter degree. She thought that the longer her sleep had been, and the more profound, the greater was usually her difficulty in opening her eyes. It is to be observed that this was a difficulty in calling into action the levators of the lids, for she had herself no difficulty in awaking, and was thoroughly awake and quite conscious at the time when she was holding her eyelids open.

She was the subject of an extremely feeble circulation, with disease of the heart, and dusky lips.

Many persons, I believe, in the early stages of presbyopia experience their first inconvenience in reading just after waking. Sometimes it may last as long as half an hour in the early morning, and during this time they may be quite unable to read small print, although having but little inconvenience at other times in the day. This symptom, of course, indicates an inability to rouse the ciliary muscle into action, and it is very probable that it is attended, if careful observations were made, with also some slight difficulty in lifting the

upper eyelid. No doubt both are associated with defective tone and with inefficient control over the local circulation. Drooping of the upper eyelids and a sleepy expression is often the most conspicuous symptom in ophthalmoplegia externa. It is also a not very infrequent condition in certain forms of severe headache associated with neurasthenia.

No. XLIV.—*Multiple cold and painless Abscesses in a young child apparently in good health.*

A little girl, brought by Dr. G——, of Upper Norwood, had four small tumours placed almost symmetrically, one on the outer part in each thigh, and one on each arm. That on the right arm was rather deeply seated in the cellular tissue, and scarcely adhered to the skin. The one on the other arm adhered to the skin, and appeared likely to point. The tumours were so absolutely painless and free from inflammation, that it had been suggested that they were sarcomata. I thought that there was obscure fluctuation in all of them, and on puncturing one with a narrow-bladed knife, this opinion was confirmed by the escape of some greenish thick pus. Thus there could be no doubt that these four swellings symmetrically placed, were small abscesses. It was not possible to assign any cause for them, for the child appeared to be in perfect health, and had not recently suffered from any illness. She had been vaccinated at the age of three months, and had had chicken-pox about six months ago, since which she had ailed nothing. We could not ascertain that there was anything suspicious as to the sanitary condition of her home. I advised that she should be taken to the seaside, and that the abscesses should be opened in succession when they came forward.

No. XLV.—*Multiple (painless) Abscesses in a young child—Empyema and history of convulsions—Entire absence of all constitutional symptoms—Recovery; with spontaneous absorption of the Empyema.*

A healthy-looking child of two years of age was brought to

me on May 5, 1873, for a tumour in the right cheek, which was supposed to be cystic. It proved, however, to be a chronic abscess, with bare and rough bone (malar). There was another small abscess in the temporal region, also going down to bare bone; a third on the side of chest, and a fourth in the calf. All were on the right side. The right chest was everywhere dull on percussion, and contracted. There was clearly an old standing empyema, but not the least history of pleuritic symptoms. No cause could be assigned for the abscesses or the pleurisy. This patient was brought to me again on May 31, 1874. His mother then informed me that all the abscesses which were opened healed very quickly, with the exception of the one over the malar bone, where a fistula still existed, leading to a bit of loose bone. The child was in excellent health. All traces of the pleural effusion had passed away, and the right side of the chest was only moderately contracted. One of the most interesting points in this curious case was the non-symmetry of the suppurations. They were all on the right side.

The mother stated that, before their formation, the child had been liable to convulsions, which were also limited to the right side. She believed that these convulsions had caused the abscesses. They were never very severe, but occurred on several occasions. The child had never had any exanthem, and a remarkable point in his state at the time that I saw him was, that although he had five abscesses and one pleura full of fluid, he appeared to be quite well. I saw the child in consultation with my friend the late Mr. John Gay.

A CATECHISM OF SURGERY; WITH CASES FOR DIAGNOSIS.

No. XCIV.—*Rare forms of Urinary Calculi.*

1. Mention the more rare forms of urinary Calculi.
2. Under what conditions is cystine met with in the urine?

ANSWERS.

1. Cystine, or cystic oxide (sulphur extractive); very rare. Xanthine; excessively rare. Uro-stealith, soap calculi; excessively rare. Bone earth (phosphate of lime); rare, excepting when mixed; may be very large. Carbonate of lime; rare; usually numerous and small.

2. Cystine may be excreted for years by persons apparently in good health. It is found most often in children or young adults, and is sometimes associated with scrofula. The tendency to it runs in families. Calculi are liable to form. Urine containing cystine is turbid when passed, has a sweet-briar odour, and light yellow colour. It evolves sulphuretted hydrogen in decomposition.

No. XCV.—*Effect of Tar, Carbolic Acid, &c., on the Urine.*

1. What is the effect of carbolic acid taken internally upon the urine?
2. Does its external use produce the same appearances?
3. Does creasote do the same?
4. Can the same be produced by tar ointment?
5. In any case of indigo-blue urine what should you suspect?

ANSWERS.

1. It causes the urine to assume a smoky or black colour.

2. If absorbed by the skin, or from a wound, it easily does the same.

3. Creasote (as first noticed by Elliotson and Hughes) does the same, or in smaller doses makes the urine green.

4. Yes.

5. If the urine be exposed a few days to the air it becomes blue (creasote and indigo are closely allied substances).

No. XCVI.—*The Urine.*

1. Does the urine vary as to its acidity at different periods of the day in healthy persons?

2. Does animal or vegetable food most conduce to its neutrality?

3. Under what conditions may vegetable food cause alkalinity of the urine?

ANSWERS.

1. The state of the urine as to acidity is inversely as that of the stomach. During the early stage of digestion the stomach is in its highest state of acidity, and at this time the urine is at its lowest, and frequently neutral. As the acidity of the stomach decreases, that of the urine rises (Basham).

2. Animal food induces a more decided neutrality than does vegetable. With a purely vegetable diet the urine never reaches a state of neutrality even during the early stage of digestion (Basham).

3. The fixed alkalies, carbonates of potash and soda or magnesia, and all combinations of these with vegetable acids, are efficient in producing an alkaline state of the urine. Thus many fruits which are acid have this effect, their salts undergoing decomposition and the alkaline base being set free. It is customary to take a dose of alkali with the juice of a lemon.

No. XCVII.—*The Urine.*

1. What are the proportions of water and solid matters in human urine?

2. What is the proportion of urea and of uric acid respectively per 1000 parts in human urine?

3. What is the proportion of extractives, and of what do they consist?

4. Mention the principal salts and give their proportions?

5. On what does the acidity of the urine depend?

ANSWERS.

1. Roughly speaking, nineteen-twentieths are water and one-twentieth solid matters; that is, water, 955, solid, 45.

2. Urea, 22 in 1000; uric acid (in combination), 0.36.

3. The extractives amount together to 6.53 in 1000. They consist of creatine, creatinine, ammonia, hippuric acid, xanthine, hypoxanthine, sarcine, pigment unoxidized, sulphur and phosphorus, mucus, &c.

4. The salts are chlorides, phosphates and sulphates, their bases being potash, soda, lime and magnesia. Soda is by far the most abundant base, whilst of lime and magnesia there is but a trace.

Chlorine in combination	4.57 per 1000
Sulphuric acid	1.31 ,,
Phosphoric acid	2.09 ,,
Potash	1.40 ,,
Soda	7.19 ,,
Lime	0.11 ,,
Magnesia	0.12 ,,

(From Sir W. Roberts.)

5 and 6. The acidity of the urine depends upon the acid phosphate of soda, and not in any degree upon uric acid, since the latter is insoluble.

No. XCVIII.—*Ménière's Disease.*

1. Is Ménière's symptom one which may easily be misinterpreted?

2. How has the term originated?

3. What diseases of the ear may this form of vertigo attend?

4. How is it to be distinguished from other forms of vertigo?

5. What is the prognosis?

6. What are the chief measures of treatment?

7. What are its synonyms, and where is it best described?

ANSWERS.

1. Those who do not understand this affection are very likely to give mistaken opinions to their patients, and lead them to think that serious brain disease is present when there is nothing of the sort.

2. Ménière (in 1861) observed that certain diseases of the ear are attended by giddiness of the most distressing kind.

3. Almost any form of ear disease may do this, but especially conditions implicating the labyrinth. Usually only one ear is affected, and there is increasing deafness in it.

4. The giddiness may occur in violent paroxysms, which may come on suddenly and cease suddenly, or it may be almost persistent. It is always increased by movement and by standing, but may occur in bed. The patient feels as if turning round or falling, and surrounding objects appear to move. Sometimes he does actually fall. The attacks often end in nausea and vomiting. The patient never loses consciousness, and there is never any paralysis. A whistling noise in the ear almost always precedes an attack.

5. As the deafness advances, the liability to giddiness usually ceases. In rare cases the deafness may be complete from the first attack.

6. The treatment consists in attention to the state of the stomach and the ear, and the use of quinine in full doses.

7. Its synonyms are: aural vertigo, Ménière's vertigo, labyrinthine vertigo. One of the best descriptions of it will be found in the Clinical Lectures of Professor Charcot (Vol. XC. of New Syd. Soc.). See also "Dean Swift's Illness" in Archives, Vol. I.

No. XCIX.—*Thomsen's Disease.*

1. What is the affection known as Thomsen's Disease?
2. What is meant by a Family disease?
3. Are Family diseases usually inherited?

ANSWERS.

1. The term "Thomsen's Disease" is given to a family

affection involving the muscular system, and usually revealing itself in early life. The muscles appear large, but are not powerful in proportion to their bulk. The contractions of the muscles are slow and wave-like. The muscles during effort may pass into a state of painless contraction preventing motion and causing stiffness. The muscular structure is coarse, the fibres large, but deficient in striation.

2. By a Family disease is meant one which usually occurs in several members of the same family, that is brothers and sisters.

3. They are often, perhaps usually, not hereditary, but appear as the exceptional and very remarkable result of the conjunction of one pair of parents.

No. C.—*Ivory Exostoses from the Ethmoid.*

1. What are the appearances represented in the above woodcut?

2. To what are they due?

3. Is the disease a very rare one?

ANSWERS.

1. This most singular appearance is produced by symmetrical and well-defined bulging masses on each side of the bridge of the nose.

2. The growths are bony exostoses springing from the ethmoid, and are attended by blocking of the nostrils.

3. The condition is an exceedingly rare one, but a few other examples of symmetrical exostoses producing precisely similar appearances are on record. [I have myself seen three cases.]

No. CI.—*General Paralysis of the Insane.*

1. State the chief facts as to general paralysis of the insane.
2. What are the symptoms in the latest stage?
3. What is its pathological anatomy?
4. Is recovery possible?
5. Does syphilis act as a cause?

ANSWERS.

1. It is far commoner in men than women, and amongst the intemperate and the labouring classes than others. General muscular weakness, progressing slowly to almost complete paralysis, is attended by delusions. Exalted ideas of wealth and position and achievements usually present at first. Attacks of maniacal excitement often occur. Ideas are deficient in connection, mistakes are made in spelling and in the composition of sentences, and the articulation is slovenly. The features lose expression.

2. In the last stage all evidences of mind, memory, speech, knowledge of persons, &c., may be lost.

3. Pia mater over hemispheres adheres to grey matter, the latter somewhat wasted. Atrophic changes in spinal cord.

4. Slight cases may recover.

5. Syphilis may predispose; indeed, recent statistical researches make it appear probable that it takes a very important share.

No. CII.—*Tabes Dorsalis.*

1. Mention the chief symptoms which denote tabes dorsalis (loco-motor ataxy).

2. What are probably the most important causes of the disease?

ANSWERS.

1. Attacks of violent colic with vomiting ("gastric crises"). Numbness in lower extremities, chiefly in soles of feet, "as if standing on velvet." Staggering gait. Loss of knee-jerk. Inability to maintain equilibrium if the feet are placed side by side (much increased if the eyes are shut). The "Argyll Robertson pupil." Small and sluggish pupils, often not symmetrical. Sluggishness both of bowels and bladder, sometimes irritability of bladder, and sometimes painless retention. Rheumatic pains, and, still more characteristic, sharp stabbing pains, lightning pains, gnawing pains. Failure of sexual function. Subjective coldness of the lower limbs. Atrophy of optic nerves (permanent). Paralysis of ocular muscles (usually temporary).

2. An attack of syphilis is probably a very common predisposing cause, and excess (relative) in sexual indulgence a very important exciting cause.

No. CIII.—*The Angular Gyrus in relation to Sight.*

1. What results have been supposed to follow destruction of the angular gyrus?

2. How do you explain the fact that although section of the optic tract causes hemiopia in each eye, destruction of the angular gyrus may cause total blindness of one eye?

ANSWERS.

1. Blindness of the eye of the opposite side. This blindness is only temporary; after a time, if the gyrus of the other side be perfect, vision returns. No loss of motor power and no damage to other special senses follows destruction of the gyrus. It is, however, not the sole centre for sight.

2. It is supposed that those fibres of the optic tract which decussate in the chiasma do not decussate again in the nuclei, whilst the others do so; and thus, so far as the brain centre is concerned, the decussation is complete.

[The question is, however, one of great intricacy, and much uncertainty attaches to our knowledge respecting it.]

No. CIV.—*Tumour in Neck.*

1. How would you distinguish between the conditions shown in the above woodcut and strumous enlargement of glands?

2. What is the probable nature of the tumour?

ANSWERS.

1. The tumour is very large, entirely one-sided, and is placed obliquely across the upper part of the neck. Chronic enlargements of lymphatic glands, when developed to the size here shown, are rarely confined to one side. They usually run lengthwise with the muscle.

2. It may be suspected, from its size, form, &c., of being a lympho-sarcoma.

[Explanation.—The tumour was undoubtedly of sarcomatous nature. It had grown quickly, was placed obliquely across the neck under the upper third of sterno-mastoid. There

were symptoms of pressure upon both the sympathetic nerve and the carotid artery. The patient died not long after the photograph was taken.]

No. CV.—*Cocaine, and its action on the Eye, &c.*

1. What is the action of cocaine on blood-vessels and on the eye in reference to the pupil, &c.?
2. Does it affect the function of accommodation?
3. What are its relations to eserine and pilocarpine?
4. What are the symptoms of cocaine poisoning?

ANSWERS.

1. Cocaine causes contraction of blood-vessels and temporary dilatation of the pupil. It does this by stimulating the sympathetic fibres—1st, those supplying blood-vessels, and 2nd, those to the dilator fibres of the iris.

2. It has little or no effect on accommodation, and none on the third nerve. The pupil, after its use, still acts to light, and during accommodation (Jessop).

3. Eserine rapidly overcomes the cocaine-mydriasis, and induces myosis. Pilocarpine also easily induces myosis after cocaine.

4. Arrest of respiration, and death by asphyxia. The heart's action fails in diastole.

No. CVI.—*The Tarsal Cartilages and Meibomian Glands.*

1. Do the "tarsal cartilages" really consist of cartilage?
2. How are the Meibomian glands placed as regards the tarsal cartilage?
3. On which surface ought a Meibomian cyst to be opened, and why?
4. How should the operation be performed?
5. Ought the gland itself to be taken out?

ANSWERS.

1. No; of fibro-cellular tissue condensed. They are so united to adjacent tissues that they cannot be dissected cleanly out. They contain the Meibomian glands.

2. They are in its substance.

3. On the under surface, because it is nearer to the conjunctiva than to the skin, and always becomes adherent to it.

4. By a very free crucial incision, after which the gland is ejected by pressure.

5. It is essential that the gland (which constitutes the cyst) should be removed, otherwise thickening will remain. (See Archives, Oct., 1891.)

No. CVII.—*Dislocation at the Shoulder-joint.*

1. In dislocation downwards at the shoulder-joint, where does the head of the humerus usually rest?

2. What are the symptoms?

3. In cases of neglected dislocation at the shoulder-joint, how long is the period after which reduction may still be suitably attempted?

4. Are there any objections to the practice of attempting to reduce dislocations at the shoulder of old standing?

ANSWERS.

1. It rests beneath the coracoid process.

2. The symptoms are: Hollow under the acromion. Head of bone felt in axilla. Fulness under the coracoid. Fixity of limb, with elbow away from side. Pain in attempting motion. Tension of fibres of deltoid. The decisive symptom is feeling the head of the bone in the armpit, and for this purpose the elbow should be lifted to a right angle with the trunk.

3. In exceptional cases reduction is said to have been effected after a year or more. Attempts after six weeks, or even after a month, often fail. Any time within three months, if the patient be not aged, it is proper to make a persevering attempt at reduction. After three months it is not wise to use much force, and perhaps not wise to attempt it at all.

4. Yes; it is a question to be carefully considered. The artery may be ruptured; the bruising may cause suppuration in the joint, or inflammation which may lead to increased stiffening. Even when successful it is sometimes doubtful whether the limb is more useful than it would have been if unreduced.

No. CVIII.—*The Treatment of Ophthalmia.*

1. Give the treatment for catarrhal ophthalmia.
2. What is its nature?
3. How would you treat strumous ulceration of the cornea (Scrofulous ophthalmia)?

ANSWERS.

1. Use a weak astringent lotion: alum, chloride of zinc, or nitrate of silver. It is very easily cured, and seldom lasts more than a week. In a majority of cases it ceases spontaneously.

2. It is a very peculiar malady, and is usually due to contagion. It is symmetrical, spontaneously curable, and shows little or no tendency to become chronic.

3. A little of a weak ointment of the yellow oxide (four grains to the ounce) of mercury should be put into the eye once a day. Blisters should be applied repeatedly behind the ears, and belladonna fomentations employed frequently to the eyes. Bark and aperients should be given, and a hot pediluvium used every evening. If the ointment, which is the most important of all, fails, a seton will often be useful.

No. CIX.—*Compression Treatment of Popliteal Aneurism.*

Give the treatment of an ordinary case of popliteal aneurism.

ANSWER.

Let the patient rest a fortnight in bed (if there be no urgency), and let him take fifteen grains of iodide of potassium every four hours, and as little fluid as possible. At the end of the time apply Esmarch's bandage (under ether), leaving the sac full of blood. Remove the elastic strap at the end of an hour and a half, and continue digital pressure upon the femoral until all pulsation ceases.

In some cases the cure will be effected by the bandage alone, but if not, a few hours of digital compression will usually suffice.

No. CX.—*For identification, description, and explanation.*

ANSWER.

The tibia and fibula of a right leg. Both bones are enlarged, and covered roughly over with osteophytic outgrowths. They are united together at the ankle, and for a considerable distance above it. On the subcutaneous surface of the tibia is seen an oval hollow, no doubt the site, during life, of an ulcer. The specimen was probably obtained from a leg which had long been affected by ulcers, and great œdematous swelling of a kind approaching to *Elephantiasis*. The patient was probably elderly. (See ARCHIVES, Vol. II. p. 200.)

No. CXI.—*Diagnosis and Treatment of Phthiriasis.*

Give the best rules for the diagnosis of Pediculosis corporis, or the results of the presence of body-lice (Prurigo senilis of the older authors).

ANSWER.

The surface shows scratches, bloody points, and small scabs. The skin is often rough and brown. If the blood-points be carefully examined it may be seen that they occupy the orifices of follicles (Tilbury Fox). They are minute, but if found are diagnostic. The patient complains much of irritation. The clothes worn next the skin must be inspected, and in them will be found the lice and their eggs (nits). The shoulders and the waist are the parts most severely affected. The exposed regions are exempt. It is common in the old and dirty, but may occur at any age and to any person.

No. CXII.—*Glass versus Pebbles.*

What are the relative merits of "pebbles" and glass for spectacles?

ANSWER.

Pebbles do not scratch, and are more easily kept from grease. They have no other advantages and they have the disadvantage of being liable to flaws and watermarks, which make them imperfect refractors. On the whole, glass is preferable. Pebbles, if good, must be dear, and if cheap are liable to be injuriously imperfect.

No. CXIII.—*The Early Stages of Syphilis.*

1. How may the development of the usual stages of syphilis be interfered with?

2. What is meant by the term "incubation" as applied to syphilis?

3. How long is the interval between exposure to contagion and the definite induration of the chancre?

4. What is usually the state of the part inoculated during that interval?

5. How long is the interval between the exposure to contagion and the occurrence of an eruption with sore throat?

6. How long may a chancre remain definitely hard?

7. What opinion should be given to a patient who asks as to the nature of a sore within three weeks of the contagion?

ANSWERS.

1. In estimating the stages of syphilis, everything depends upon whether or not the specific (mercury) has been used. If mercury has been given, the stages may be indefinitely delayed or prolonged. Hence many fallacies in the statements of authors. If no kind of antidote be used, the stages are probably very nearly uniform.

2. The incubation period is the interval between the date of contagion and the development of definite induration in the sore.

3. It is usually about a month.

4. During this period there may have been nothing what-

ever to be noticed, or there may have been at first a trifling sore which soon healed, or there may have been throughout a non-indurated ulcer. If a non-indurated sore has preceded the induration, and if suppuration continues after the hardness has developed, it is said to be a "mixed sore." During the last week or ten days of the incubation period the sore has usually been developing gradually from a little papule onwards to the condition of specific induration.

5. About a fortnight after the induration has become definite, that is about six weeks from the contagion (provided no mercury has been given), a rash and sore throat may be looked for.

6. The duration of induration is very variable, even when specifics are not given. The hardness may vanish in a few days, or it may last some months. Usually, perhaps, it lasts two or three months. It may disappear and return again.

7. A patient seeking an opinion before the incubation period is over should be told that it is not possible to give one.

No. CXIV.—*Treatment of the Early Stages of Syphilis.*

Give rules for the treatment of a case of indurated chancre with secondary eruption.

ANSWER.

Mercury is the specific. It should be given alone or in combination with opium or with iron. The course should be continued for six to nine months. Grey powder in one grain doses every four hours, or oftener, is a very convenient form. If the patient is pale and feeble, combine with it a third of grain of extract of nux vomica and two grains of reduced iron (ferrum redactum). If there is diarrhœa, combine Dover's powder. Apply black wash to the chancre, and ammoniochloride ointment to all spots. Prohibit smoking, beer and wine, fruits, green vegetables and coffee (fear of diarrhœa), and advise as much rest in the house and in bed as circumstances permit. The patient may, however, usually be allowed to go about his ordinary avocation.

No. CXV.—*The Plague.*

1. What is the incubation period of true plague?

2. What is the usual duration of its attack in fatal cases?

3. What suggestions may be made in explanation of the periodicity of outbreaks of plague?

4. When did the first epidemic of undoubted bubonic plague occur?

5. Were the so-called Plague of Athens and the epidemics recorded in the time of Marcus Aurelius true bubonic plague?

6. When did the last English epidemic of plague occur?

7. What had been the history of the disease in England in times anterior of the last great epidemic?

ANSWERS.

1. The usual incubation period is four days, but it may be rather more or rather less.

2. Most fatal cases end on the third day, and those patients who survive the fifth usually recover. Death may, however, in acute cases, occur on the first day.

3. It may be plausibly supposed that certain conditions as regards season and weather favour the development of the virus.

4. The first epidemic of bubonic plague, the evidence concerning which can be trusted, occurred in the time of Justinian (527 A.D.).

5. No, they were probably not true plague.

6. The last epidemic in England was in 1666, and the last sporadic case in 1679.

7. Between the times of the Black Death (fourteenth century), which was plague, and the last epidemic in 1666, there were many smaller epidemics, and the disease was probably never wholly absent from England. Henry VII. crossed over to Calais to avoid it (1499), and it was very prevalent in the year of accession of James I. (1603).

No. CXVI.—*The Plague.*

1. What was the nature of the plague?

2. What feature distinguishes true plague from other fevers?

3. What peculiarities are observed as regards the contagion of plague?

4. What is the meaning of the term Autocthonous, and is it applicable to plague?

5. Was the Black Death the same disease as plague?

6. What climatic and seasonal conditions influence the spread of plague?

7. Is there any difference in liability in different races?

ANSWERS.

1. Plague is a specific contagious fever.

2. The remarkable implication of the lymphatic system, and the production of glandular abscesses. Hence the name "bubonic plague."

3. It does not readily spread from man to man in accidental transitory intercourse. Those who live in the house take it, but not often occasional visitors. Thus physicians usually escape. It may be conveyed by those who have not contracted it, and is remarkably prone to be carried in clothes, merchandise, &c.

4. The term means capable of self-origination, and is not applicable to plague, which, so far as we know, is always produced by the conveyance of a specific poison.

5. The Black Death was probably a virulent form of plague. It was often attended by buboes, but it had a peculiar feature in the proneness to spitting of blood.

6. Great heat and great cold alike seem to be unfavourable to the life of the virus. Thus in cold countries plague prevails in summer and autumn, and in hot ones in spring and early summer. Exceptions, however, occur.

7. No race is exempt. Negroes suffer very severely.

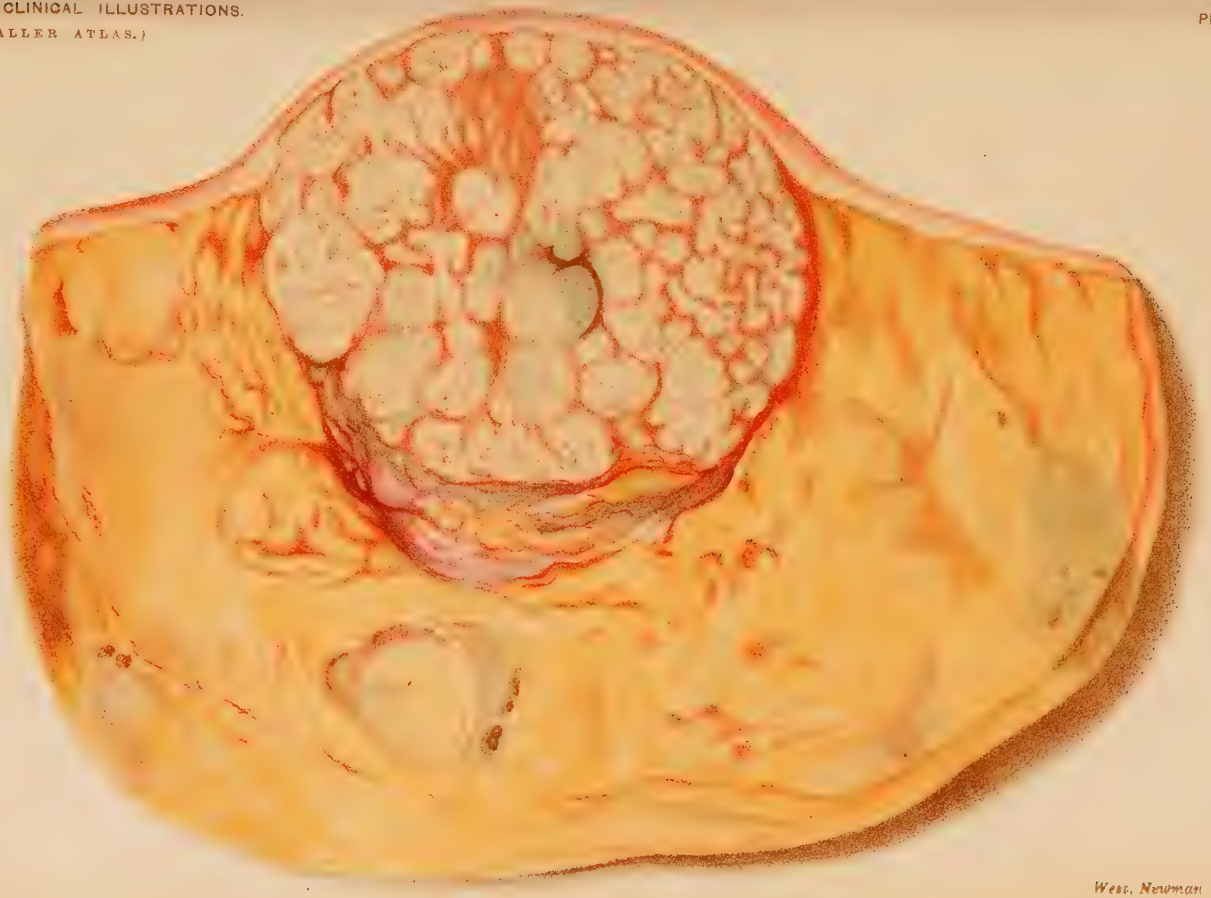
PLATE XLII.

A SOFT, MUCH LOBULATED ADENOMA OF THE BREAST.

This portrait may serve as a fair typical illustration of a rapidly growing adenomatous tumour. It will be seen that the growth is limited, encapsuled, and almost round. It is close beneath the skin, which has been lifted by it. Its structure shows very distinctly arrangement in lobules. The section of these is chiefly of a dull white colour, but here and there stained green, and containing small mucous cysts. The breast itself has been almost entirely replaced by yellow fat, in which were many small cysts containing a greenish mucoid fluid.

The patient was a woman, aged forty-eight, under my care in the London Hospital in October, 1876. She was very stout. The growth was so soft that fluctuation was suspected.

Mr. Robert W. Parker was good enough to prepare sections for me, which well demonstrated its adenoid structure.



West, Newman chromo.

PLATE XLIII.

A CASE IN WHICH CONGENITAL ANGEIOMATA AND ENCHONDROMATA CO-EXISTED IN THE UPPER AND LOWER EXTREMITIES OF THE SAME SIDE.

This Plate exhibits the aspect during life of a limb which may now be found as No. 410A, in the Museum of the Royal College of Surgeons. The conditions were in part congenital, but they had undergone great increase during the patient's lifetime. The limb had finally become such an encumbrance that amputation was gladly submitted to. The patient, at the time that he was under my care in the London Hospital, was a man of about forty-six and in good general health. He believed that the affected limb had been dwarfed from infancy, and that tumours had been present in his fingers and toes as long as he could remember. The right limbs only were affected. The right femur had been fractured four times, and the tibia and fibula once. In addition to the conditions shown in the portrait, there were numerous lumpy masses in the cellular tissue of the upper part of the thigh. These were left behind at the amputation, which was performed through the thigh, and they showed but little tendency to growth. The hand was to a large extent disabled by tumours, which were developed partly in the cellular tissue and in part in connexion with the bones. These were probably some of them cartilaginous and some angeiomatous.

I am indebted to Mr. F. Eve, then Assistant Conservator at the College of Surgeons, for a very careful report as to the nature of the growths. This report was published in detail in vol. xxxviii. of the Pathological Society's 'Transactions,' page 327. Mr. Eve found:—1st. That the swelling surrounding the ankle-joint consisted of a soft, semi-fluctuating "sarcoma." It was white, semi-diffluent, and of cartilaginous aspect. It had destroyed the ankle-joint and infiltrated its adjacent bones. This growth was probably of recent formation, or, at any rate, had undergone recent changes. 2nd. Around the phalanges of the toes were smooth tumours of bony hardness, probably ossified enchondromata. 3rd. In the head of

the tibia, and in various parts in connexion with the femur, were islands of imperfectly formed cartilage. 4th. And lastly, the most interesting fact was the demonstration of very numerous cavernous angeiomata in the cellular tissue. These had been developed chiefly in connexion with the larger veins, but they had supplying arteries. They were easily injected from the veins. They were very numerous and most of them subcutaneous. They "constituted softish rounded swellings, having much the appearance of the common subcutaneous fibrous tumour.

This case appears to me to present several features of extreme interest to the student of intra-uterine disease, and of the tendencies of congenital tissue-malformations.

1st. We have the fact that multiple enchondromata in connexion with the bones, and multiple angeiomata in connexion with the subcutaneous veins, were present at birth in the same limbs.

2ndly. That these multiple tumours were coincident with dwarfing of the affected limbs, and with brittleness of the large bones.

3rdly. That the changes occurred in an upper and lower extremity on the same side.

4thly. The evidence of distinct tendency to growth on the part of the abnormal tissues subsequent to the patient's birth.

5thly. The assumption on the part of one or more of the growths of a sarcomatous character.

We may suitably compare the angeiomata and cartilaginous tumours with the defects in tegumentary development which are classed as moles. They are, making allowance for difference of tissue involved, of the same character, and might be designated subcutaneous moles. I have often asked attention to the fact that moles are often of multiform characters—thus we may see pigment moles, papillary moles, and nævi, all present together—and also to the additional fact that all forms of moles are liable exceptionally to take on growth in after life. Their liability to become the seat of sarcomata has long been recognised. It is, however, very rare to find moles arranged unilaterally. There are certain rare cases of congenital angeioma with hypertrophy of an entire limb, which may possibly be in some sort the parallels of this case in an exaggerated form.

I must refer the reader interested in the subject to the admirable report by Mr. Eve, from which I have quoted.

West, Newman, chromo.

PLATE XLIV.

LUPUS ERYTHEMATOSUS,

(THE MOST SUPERFICIAL FORM.)

I HAVE copied this plate from Montmeja's Atlas (photographic), because it illustrates better than any original one which I possess the most superficial and purely erythematous form of lupus erythematosus. It will be seen that almost the whole face is occupied by erythematous patches which are somewhat ill-defined, but are arranged in tolerable symmetry. With the exception that the nose itself has almost escaped, the bats'-wing or butterfly form is very fairly reproduced. It will be observed that there is no thickening of the parts affected, and nowhere any crusts. Little discs and crescents, which are so often characteristic of lupus erythematosus, are here represented by mere dots. These latter are seen to be scattered over the nose and chin.

This portrait may be suitably compared and contrasted with that given in the last number of 'Archives,' Plate XXXVIII., which represented a somewhat more severe form of the same malady. I am not able to give any history of this individual patient, and the portrait must stand simply for an illustration of this particular disease. Something may perhaps be inferred as to its history from the fact that it is designated by Montmeja as Scrofulide erythemateuse.

This type of Lupus Erythematosus is, in my experience, one of the most serious of all, and the most difficult of cure. It is always associated with much delicacy of constitution, and often very closely with tuberculosis. The hands and other parts of the body often become affected later on in the case.

West, Newman chromo.

PLATE XLV.

ICHTHYOSIS IN STREAKS (NON-SYMMETRICAL). TIGER ICHTHYOSIS.

This portrait is of great interest and value as illustrating one of the most extensive cases of ichthyosis of the non-symmetrical form which I have ever seen. Many years ago I drew attention to the occurrence of congenital streaks of pigmented patches or of papillary growths occurring on the limbs or on the body, and always definitely unilateral. The suggestion was made that they looked as if they might be the result of a sort of intra-uterine herpes zoster. I directed attention, however, prominently and especially in my Presidential Address at the Neurological Society, to the fact that these streaks do not run in the course of distribution of nerves, although they may often, on superficial examination, appear to do so. Plates I. and II. of my smaller 'Clinical Illustrations' illustrate the unilateral distribution of white streaks on the dark skin of a Hindoo, and I may refer to a description of them in 'Archives,' vol. i. The present portrait is of special interest from the fact that the streaks, which were covered with papillary growths, black with dirt, involve almost the entire surface. The ordinary forms of papillary ichthyosis are diffuse and symmetrical, but careful inspection of the Portrait will convince anyone that, although so extensive, the disease, in this instance, has a definite tendency to non-symmetry. It is also not diffuse, but arranged in streaks. It will be seen that the right half of the child's trunk is almost free, the line of demarcation passing vertically up the front of the body and chest. The right upper arm is also free, and the right side of the forehead almost so, whilst the corresponding regions of the other side are covered with papillary streaks. This form of non-symmetrical ichthyosis differs entirely from the diffuse one in the fact that it is never a family disease. I have never seen more than one child in a family who

was suffering from it, whereas in common ichthyosis one-half of the family is almost invariably affected.

As regards treatment, I may remark that great benefit will be obtained by snipping away the papillary growths with a pair of scissors curved on the flat; or, should they be too small to use this procedure, by destroying them with the actual cautery.

The subject of the portrait was an infant, aged six months, who was sent to me in 1886 by Mr. E. H. Carter, of Chelmsford. The conditions had become very much more conspicuous since the infant's birth, and were still increasing. I do not think, however, that there had been any real increase in the number or size of the streaks.

There were three other children in the family, and none of them presented any peculiarity.

West, Newman chromo.